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# STUDER D941 Mixing Console

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## Contents of Schemata / Circuit Diagram Sections in Numerical Order

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1.917.310.00.....	CR/Studio Monitor Amplifier ..... 7
1.917.311.00.....	Subcard for CR/Studio Monitor ..... 7
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1.917.330.81.....	PFL/Talk Back Headphone Amplifier ..... 7
1.917.331.00.....	Subcard for PFL Talk Back Headphone ..... 7
1.917.601.00.....	Monitor Relays Unit 8x2/2 ..... 7
1.917.611.00.....	Signal Input/Output Interface ..... 7
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1.940.601.00.....	Power Supply 5V/20A ..... 7
1.940.602.00.....	Power Supply $\pm 15V/3.4A$ ..... 7
1.940.603.00.....	Power Supply 24V/4.2A ..... 7
1.940.712.00.....	Surface Interface ..... 2
1.940.712.20.....	Surface Interface ..... 3
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1.940.765.00.....	Centralized Unit..... 3
1.990.190.31.....	Modul Processor Board ..... 5
1.990.420.00.....	CR Monitor Control Unit ..... 4
1.990.429.00.....	- CR Monitor Switch Board ..... 4
1.990.430.00.....	Studio Monitor Control Unit ..... 4
1.990.439.00.....	- Studio Monitor Switch Board ..... 4
1.990.440.00.....	PFL/Talk Back Headphone Unit ..... 4
1.990.449.00.....	- PFL/Talk Back Switch Board ..... 4
1.990.490.00.....	Source Selector Unit ..... 4
1.990.496.00.....	Serdat Master Interface ..... 5
1.990.497.00.....	Serdat Slave Interface ..... 5
1.990.498.00.....	Source Selector Unit ..... 4
1.990.499.00.....	- Source Selector Switch Board ..... 4

**SCHEMATA / CIRCUIT DIAGRAMS**

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**Fader Panel Units**

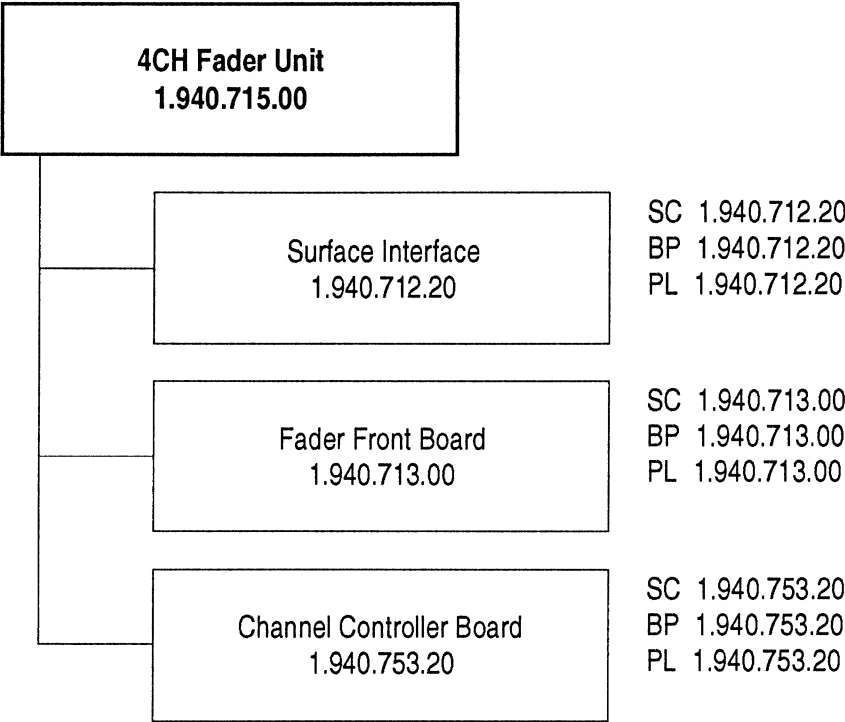
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4CH Fader Unit .....	1.940.715.00
Surface Interface .....	1.940.712.00
Fader Front Board .....	1.940.713.00
Channel Controller Board .....	1.940.753.20



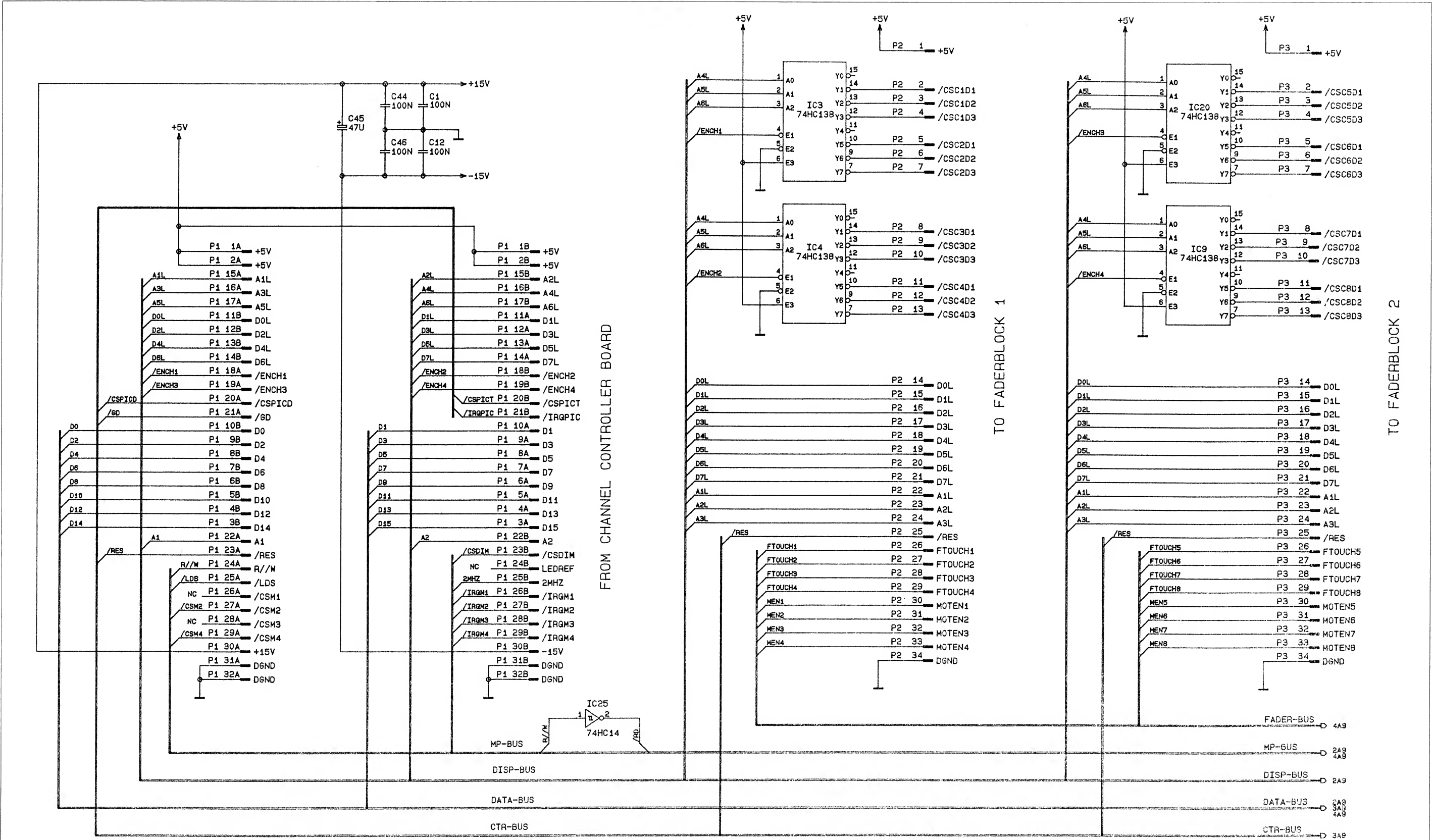
**4CH Fader Unit**

**1.940.715.00**



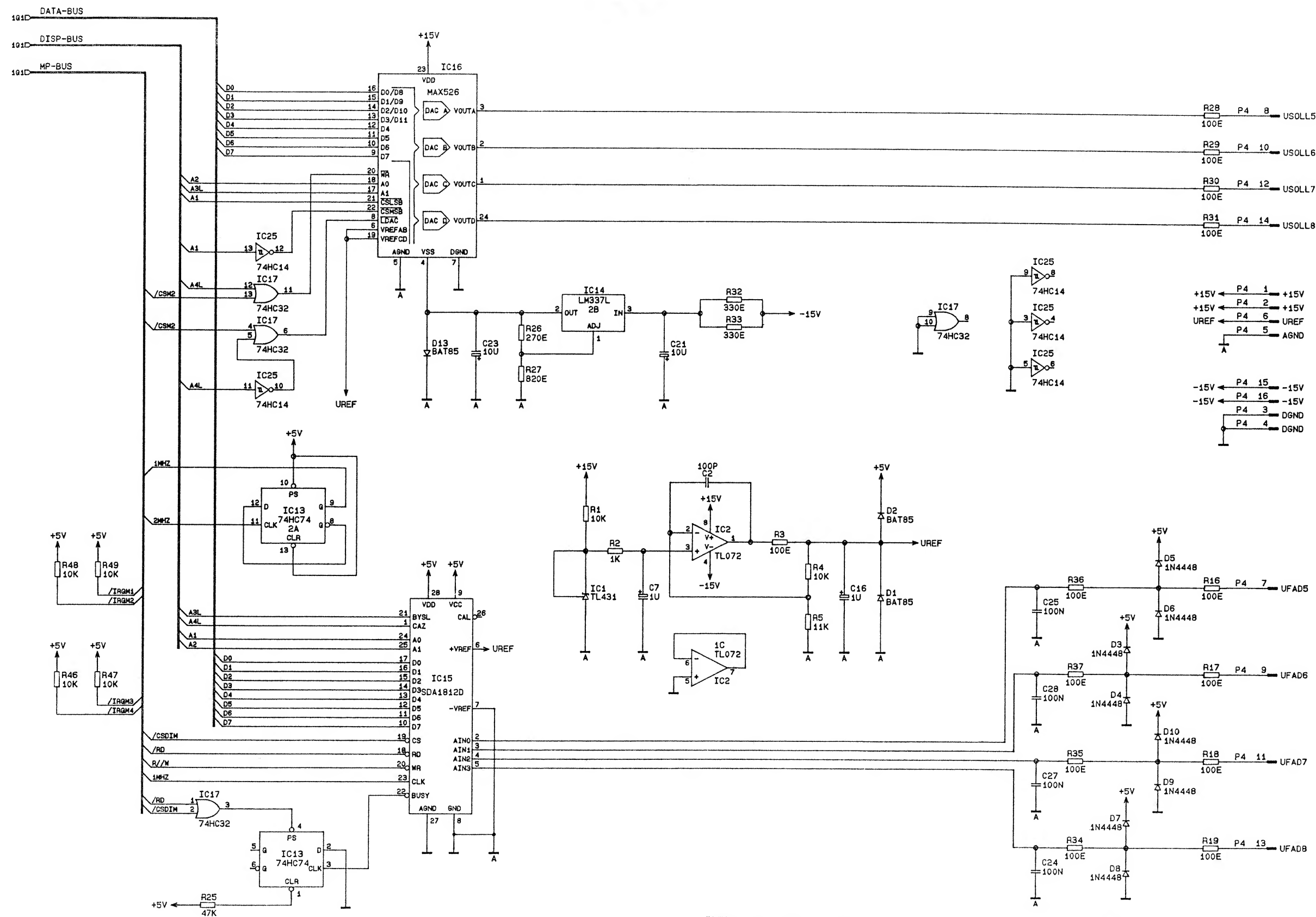
SC: Schema      Circuit Diagram  
BP: Bestückungsplan    PCB Layout  
PL: Positionsliste      Positional List

Surface Interface 1.940.712.20





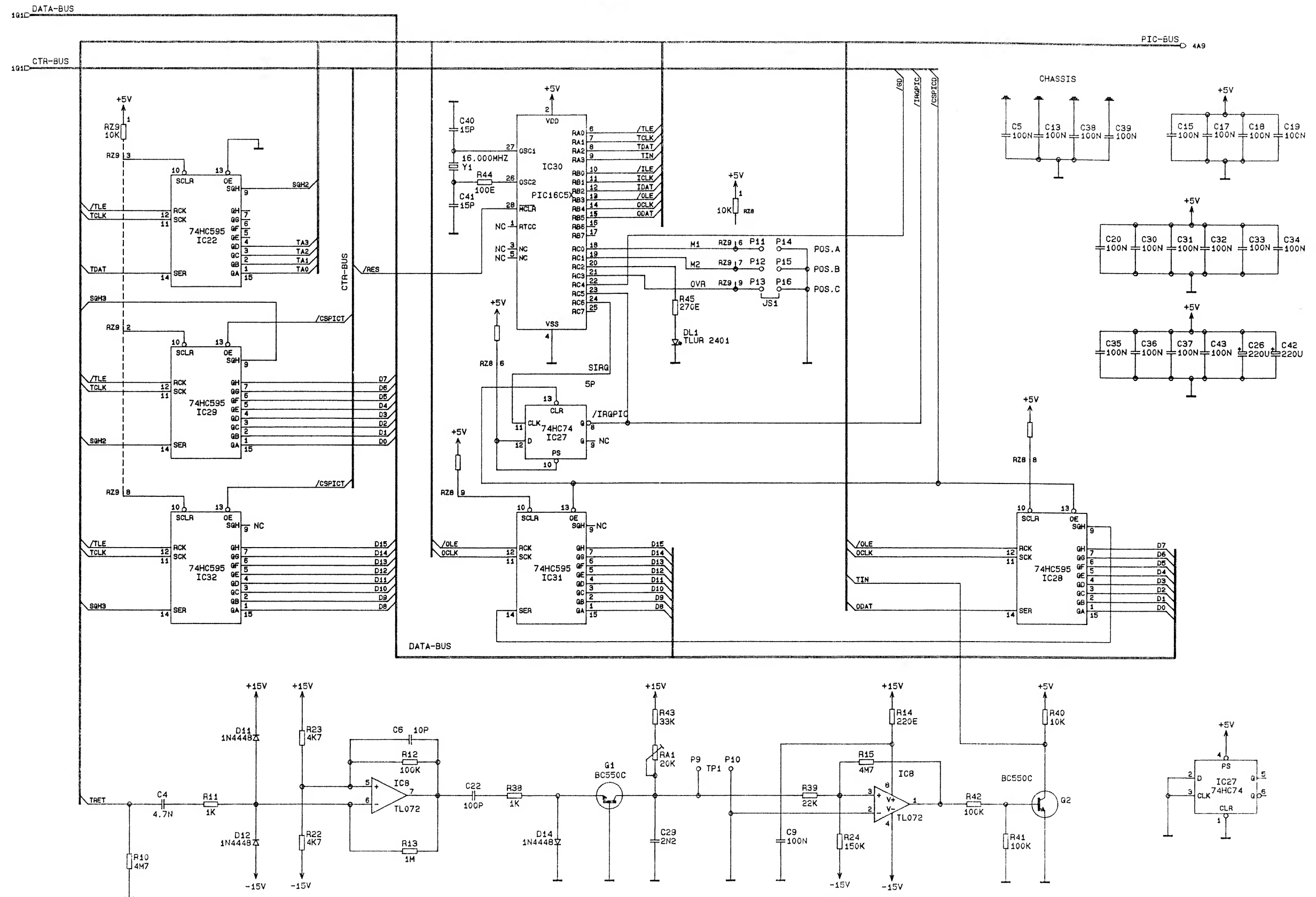
Surface Interface 1.940.712.20



TO FADER FRONT BOARD 2

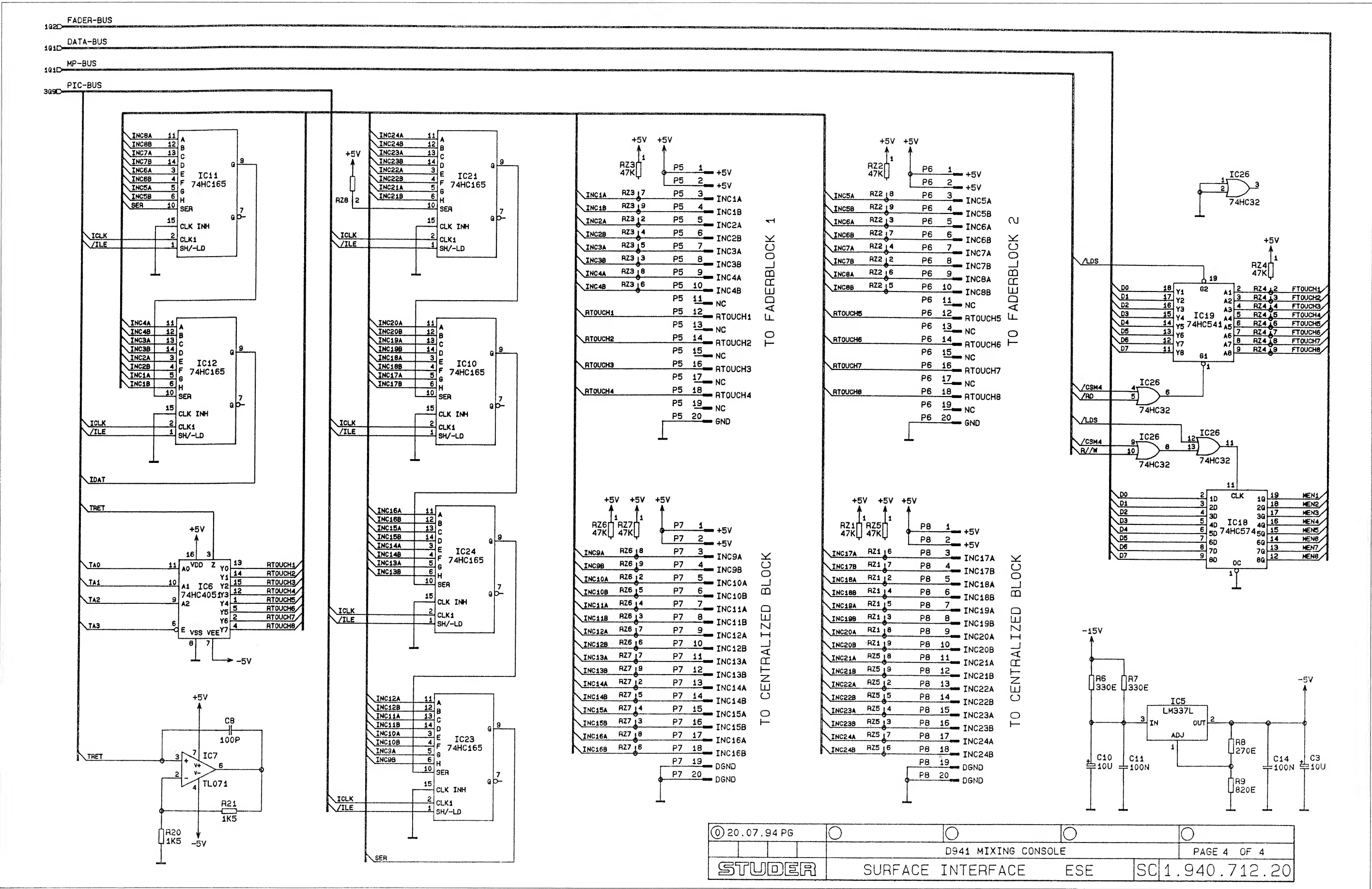


**Surface Interface 1.940.712.20**





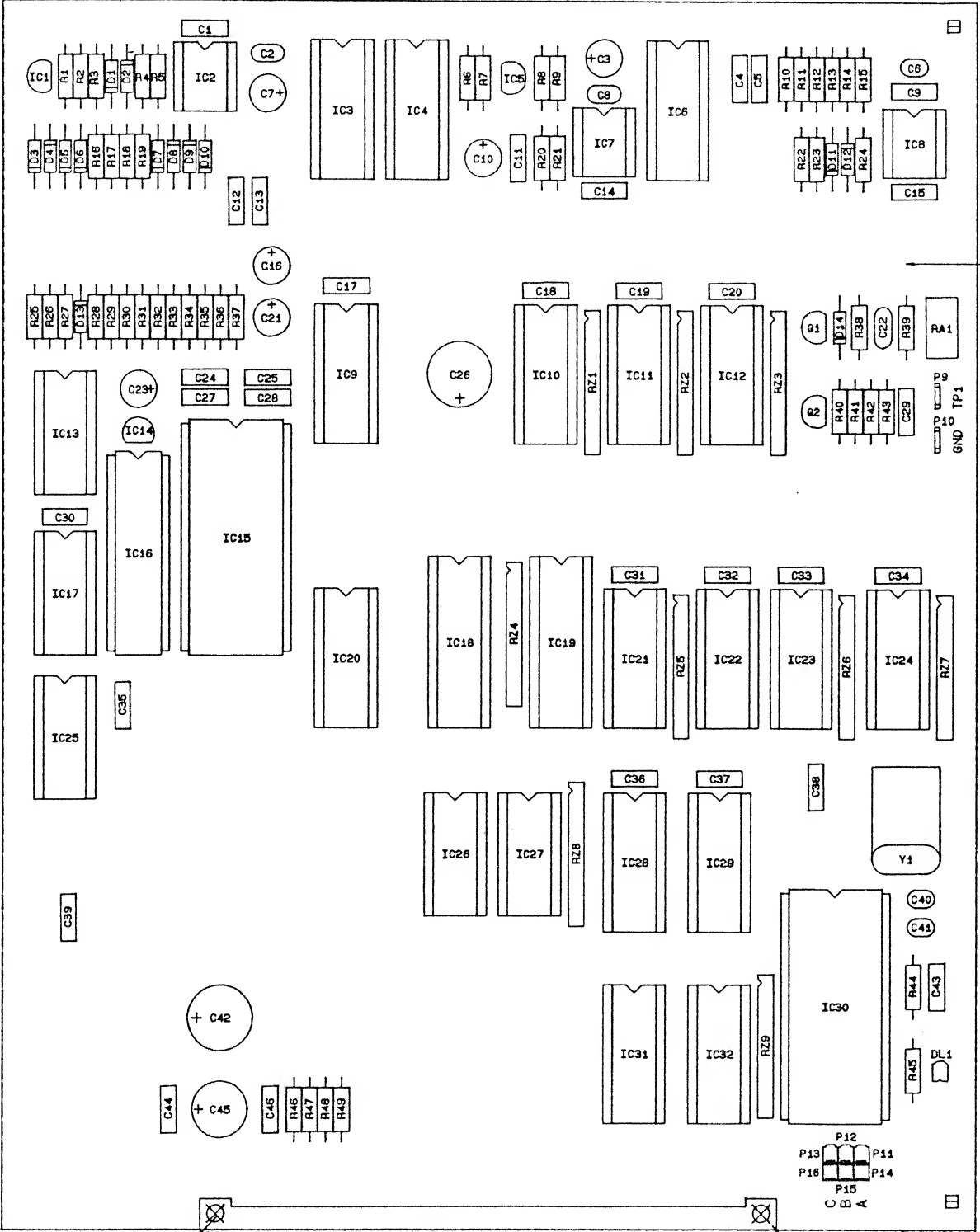
Surface Interface 1.940.712.20



Surface Interface 1.940.712.20



Component side

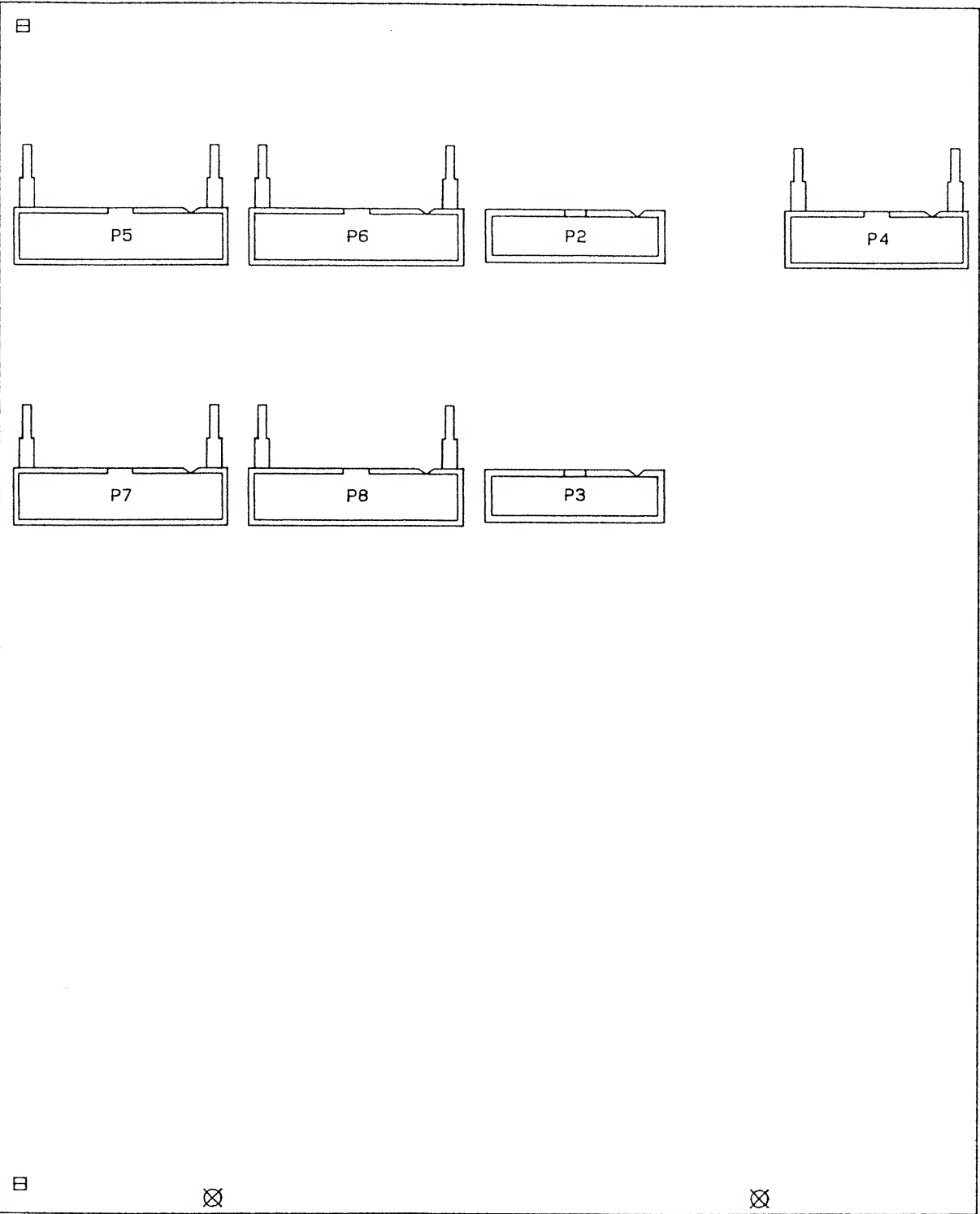


MP5

P1

MP5

Solder side

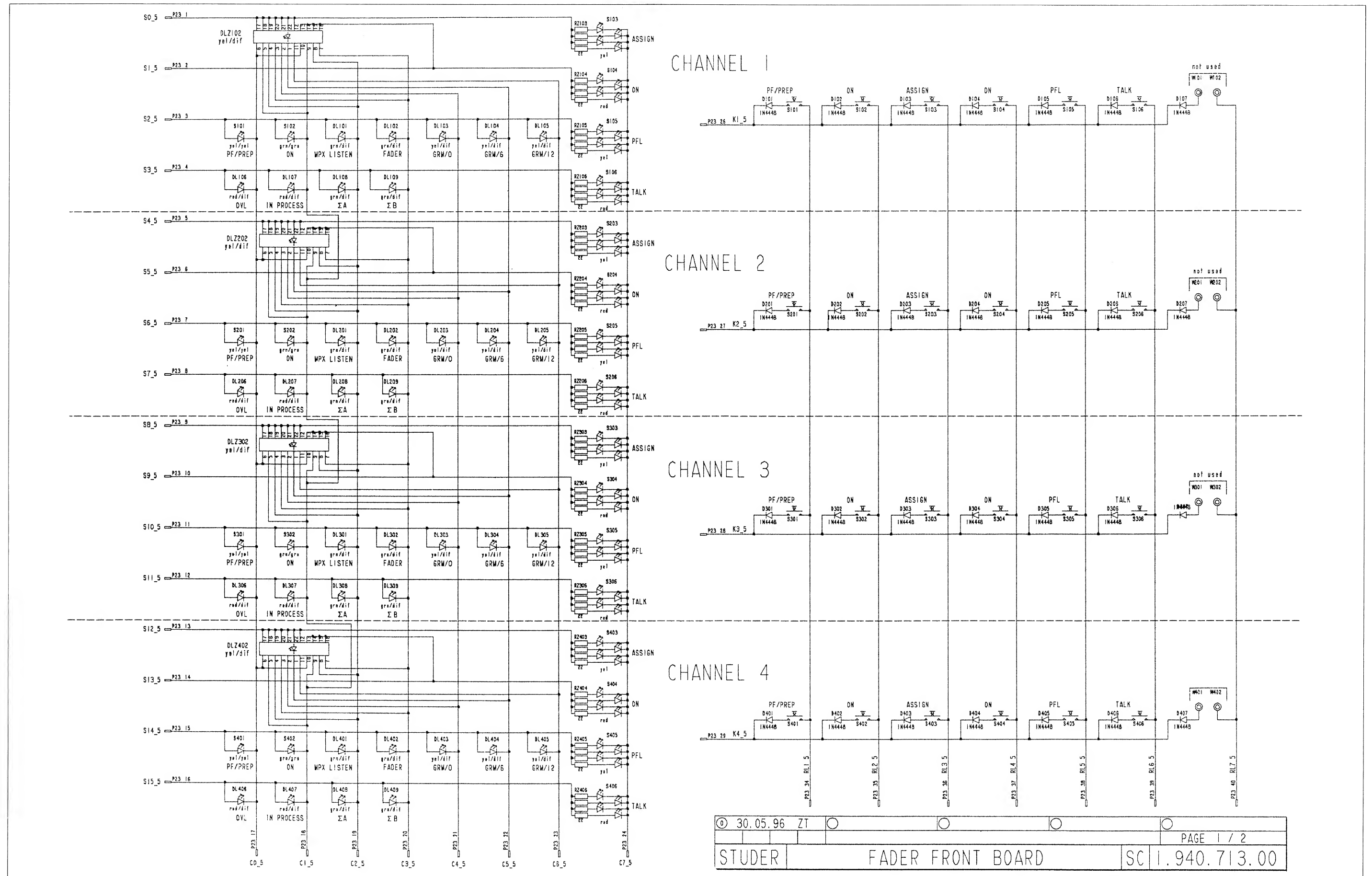


○				
○				
○				
①	20.07.94	PG		
IND	DATUM	GEZ.	SEPR.	GES.
BLATT 1 VON 1				
BP	1.940.712.20			



Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.06.0104	100n	PETP, 10%, 63V		0	IC 21	50.17.1165	74HC165	IC ... 74 HC 165 ..	,A	0	R 41	57.11.3104	100k	MF, 1%, 0207	
0	C 2	59.34.4101	100p	CER 63V, 5%, N750		0	IC 22	50.17.1595	74HC595	IC ... 74 HC 595 ..	,A	0	R 42	57.11.3104	100k	MF, 1%, 0207	
0	C 3	59.22.6100	100u	EL 35V, 20%, rad RM5		0	IC 23	50.17.1165	74HC165	IC ... 74 HC 165 ..	,A	0	R 43	57.11.3333	33k	MF, 1%, 0207	
0	C 4	59.06.0472	4n7	PETP, 10%, 63V		0	IC 24	50.17.1165	74HC165	IC ... 74 HC 165 ..	,A	0	R 44	57.11.3101	100R	MF, 1%, 0207	
0	C 5	59.06.0104	100n	PETP, 10%, 63V		0	IC 25	50.17.1014	74HC14	IC ... 74 HC 14 ..	,A	0	R 45	57.11.3271	270R	MF, 1%, 0207	
0	C 6	59.34.1100	10p	CER 63V, 5%, NP 0		0	IC 26	50.17.1032	74HC32	IC ... 74 HC 32 ..	,A	0	R 46	57.11.3103	10k	MF, 1%, 0207	
0	C 7	59.22.8109	1u	EL 50V, 20%, rad RM5		0	IC 27	50.17.1074	74HC74	IC ... 74 HC 74 ..	,A	0	R 47	57.11.3103	10k	MF, 1%, 0207	
0	C 8	59.34.4101	100p	CER 63V, 5%, N750		0	IC 28	50.17.1595	74HC595	IC ... 74 HC 595 ..	,A	0	R 48	57.11.3103	10k	MF, 1%, 0207	
0	C 9	59.06.0104	100n	PETP, 10%, 63V		0	IC 29	50.17.1595	74HC595	IC ... 74 HC 595 ..	,A	0	R 49	57.11.3103	10k	MF, 1%, 0207	
0	C 10	59.22.6100	10u	EL 35V, 20%, rad RM5		0	IC 30	50.16.0301		IC PIC 16 C 57-HS/P	,A						
0	C 11	59.06.0104	100n	PETP, 10%, 63V						PIC 16 C 57-HS/P SW940712 (1.940.930.20)		0	RA 1	58.01.9203	20k	Cermet, 10%, 0.5W, vertical	
0	C 12	59.06.0104	100n	PETP, 10%, 63V		0	IC 31	50.17.1595	74HC595	IC ... 74 HC 595 ..	,A						
0	C 13	59.06.0104	100n	PETP, 10%, 63V		0	IC 32	50.17.1595	74HC595	IC ... 74 HC 595 ..	,A	0	RZ 1	57.88.4473	47k	RZ 8 * 47 K, 2%, SIP 9	
0	C 14	59.06.0104	100n	PETP, 10%, 63V								0	RZ 2	57.88.4473	47k	RZ 8 * 47 K, 2%, SIP 9	
0	C 15	59.06.0104	100n	PETP, 10%, 63V		0	JS 1	54.01.0021	Jumper	0.63 * 0.63mm		0	RZ 3	57.88.4473	47k	RZ 8 * 47 K, 2%, SIP 9	
0	C 16	59.22.8109	1u	EL 50V, 20%, rad RM5		0	MP 1	1.940.712.11	1 pce	SURFACE INTERFACE PCB	/A	0	RZ 4	57.88.4473	47k	RZ 8 * 47 K, 2%, SIP 9	
0	C 17	59.06.0104	100n	PETP, 10%, 63V		0	MP 2	1.940.712.04	1 pce	NR-ETIKETTE 5 * 20		0	RZ 5	57.88.4473	47k	RZ 8 * 47 K, 2%, SIP 9	
0	C 18	59.06.0104	100n	PETP, 10%, 63V		0	MP 3	43.01.0108	1 pce	Label	ESE-WARNschild	0	RZ 6	57.88.4473	47k	RZ 8 * 47 K, 2%, SIP 9	
0	C 19	59.06.0104	100n	PETP, 10%, 63V		0	MP 4	1.101.001.20	1 pce	Label	TEXT-ETIK. 5*20 HARDWARE -20	0	RZ 7	57.88.4473	47k	RZ 8 * 47 K, 2%, SIP 9	
0	C 20	59.06.0104	100n	PETP, 10%, 63V		0	MP 5	28.99.0119	2 pce		ROHRNIETE D 2.5*0.15* 9	0	RZ 8	57.88.4103	10k	RZ 8 * 10 K, 2%, SIP 9	
0	C 21	59.22.6100	10u	EL 35V, 20%, rad RM5		0	MP 6	65.99.0167	10 mm	Tape	POLYURH. KLEBBAND WS, 9* 3	0	RZ 9	57.88.4103	10k	RZ 8 * 10 K, 2%, SIP 9	
0	C 22	59.34.2*01	100p	CER 63V, 5%, N150								0	XIC 15	53.03.0173	28p	DIL 0.6", lot, gerade	
0	C 23	59.22.6100	10u	EL 35V, 20%, rad RM5								0	XIC 30	53.03.0173	28p	DIL 0.6", lot, gerade	

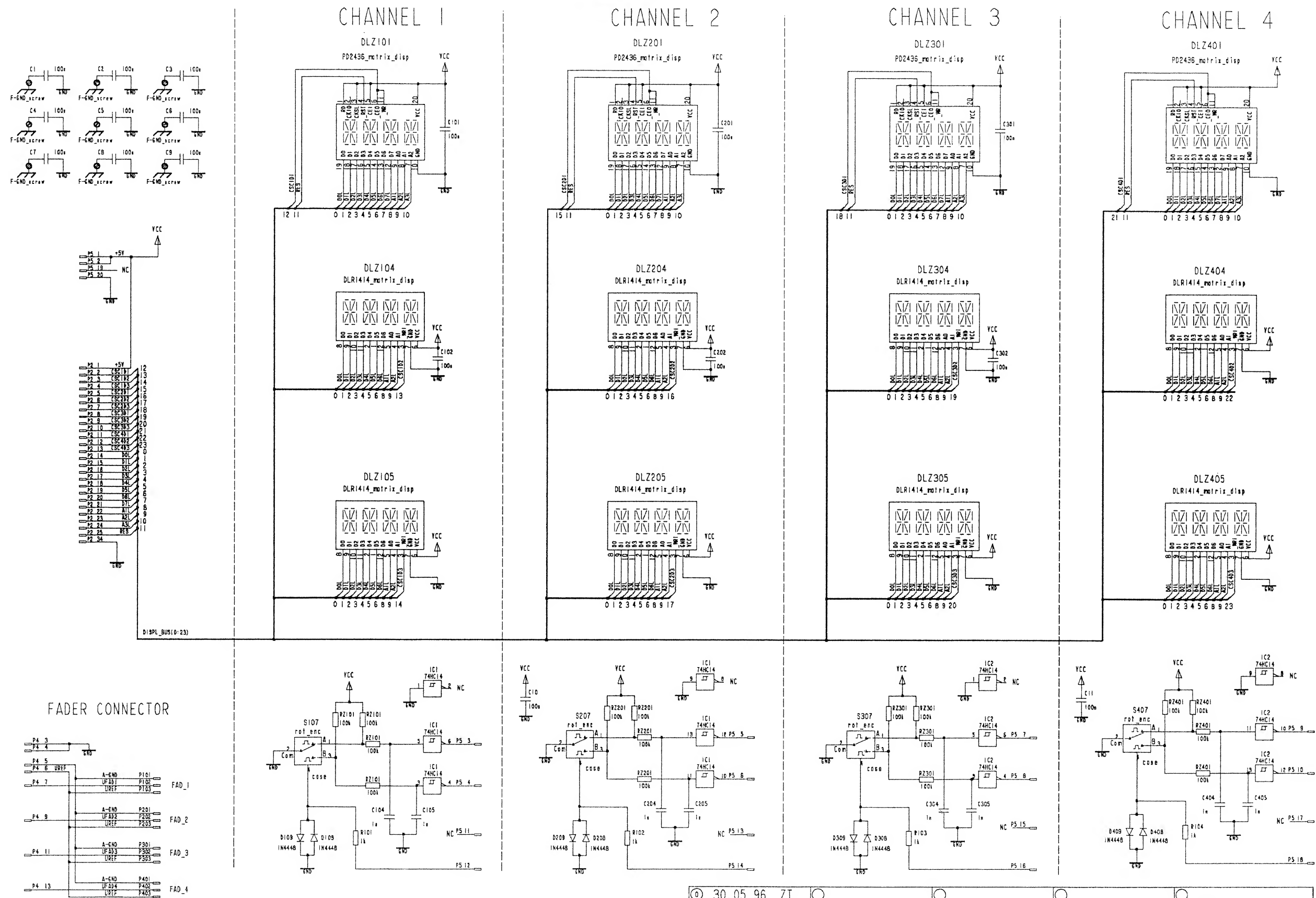






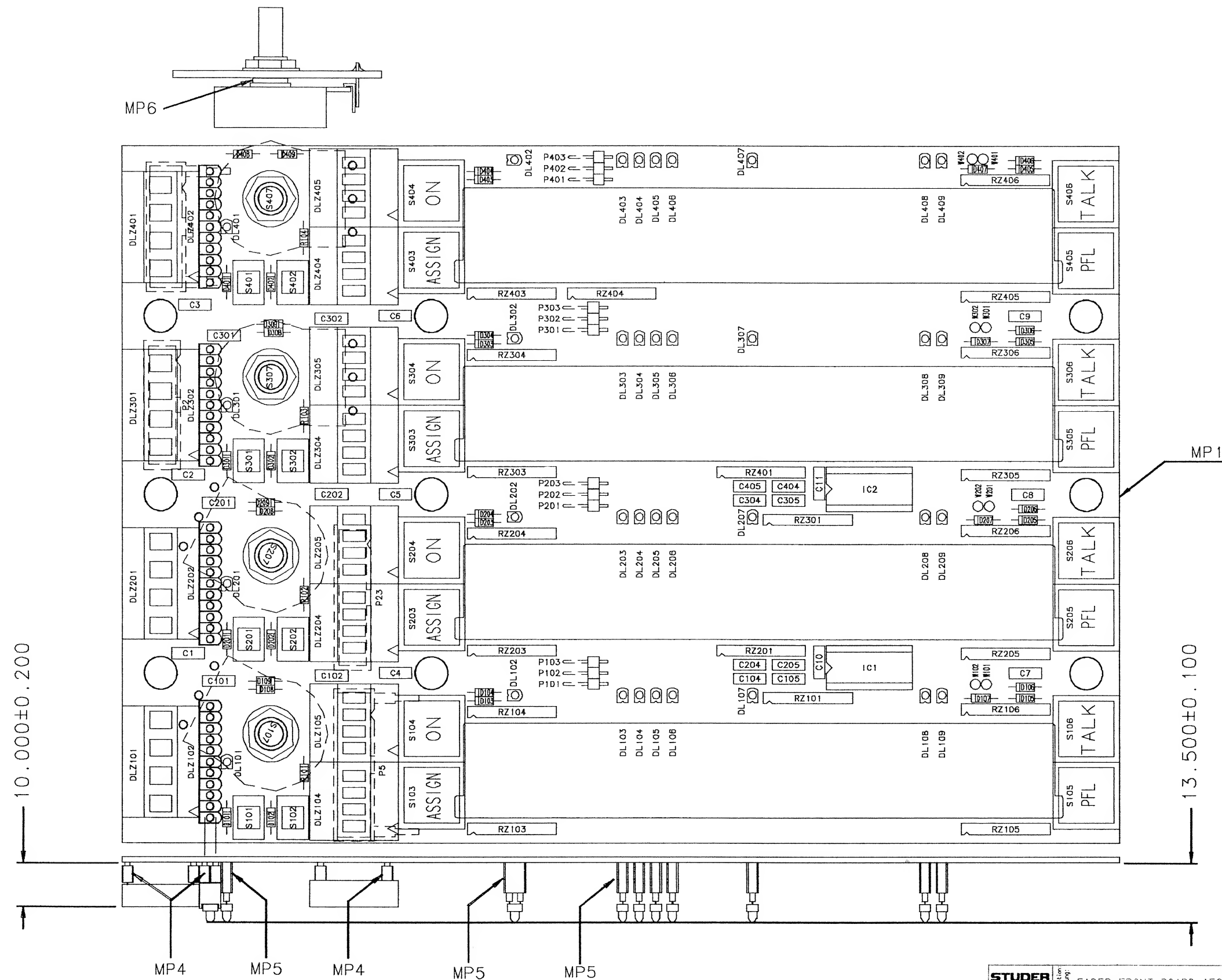


**Fader Front Board 1.940.713.00**





**Fader Front Board 1.940.713.00**



Wissification nummering				.	.	.	(3)
				.	.	.	(2)
				.	.	.	(1)
Edition Aussage	50.	05.	96	ZT			(0)
Date Datum				Visto Ges.	Dispos. Gepf.	Schein Ges.	Index
Copy to: Kopie fuer:							
Namener: Nummer:	1.940.713.00						



Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59 06 0104	100n	PETP, 10%, 63V	
0	C 2	59 06 0104	100n	PETP, 10%, 63V	
0	C 3	59 06 0104	100n	PETP, 10%, 63V	
0	C 4	59 06 0104	100n	PETP, 10%, 63V	
0	C 5	59 06 0104	100n	PETP, 10%, 63V	
0	C 6	59 06 0104	100n	PETP, 10%, 63V	
0	C 7	59 06 0104	100n	PETP, 10%, 63V	
0	C 8	59 06 0104	100n	PETP, 10%, 63V	
0	C 9	59 06 0104	100n	PETP, 10%, 63V	
0	C 10	59 06 0104	100n	PETP, 10%, 63V	
0	C 11	59 06 0104	100n	PETP, 10%, 63V	
0	C 101	59 06 0104	100n	PETP, 10%, 63V	
0	C 102	59 06 0104	100n	PETP, 10%, 63V	
0	C 104	59 06 0102	1n0	PETP, 10%, 63V	
0	C 105	59 06 0102	1n0	PETP, 10%, 63V	
0	C 201	59 06 0104	100n	PETP, 10%, 63V	
0	C 202	59 06 0104	100n	PETP, 10%, 63V	
0	C 204	59 06 0102	1n0	PETP, 10%, 63V	
0	C 205	59 06 0102	1n0	PETP, 10%, 63V	
0	C 301	59 06 0104	100n	PETP, 10%, 63V	
0	C 302	59 06 0104	100n	PETP, 10%, 63V	
0	C 304	59 06 0102	1n0	PETP, 10%, 63V	
0	C 305	59 06 0102	1n0	PETP, 10%, 63V	
0	C 404	59 06 0102	1n0	PETP, 10%, 63V	
0	C 405	59 06 0102	1n0	PETP, 10%, 63V	
0	D 101	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 102	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 103	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 104	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 105	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 106	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 107	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 108	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 109	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 201	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 202	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 203	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 204	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 205	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 206	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 207	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 208	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 209	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 301	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 302	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 303	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 304	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 305	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 306	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 307	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 308	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 309	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 401	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 402	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 403	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 404	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 405	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 406	50 04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 407	50 04 0125	1N4448	75V, 150mA,	

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	DL 303	50 04 2133		TLUY 2401	DL TLUY 2401 GB MATT
0	DL 304	50 04 2133		TLUY 2401	DL TLUY 2401 GB MATT
0	DL 305	50 04 2133		TLUY 2401	DL TLUY 2401 GB MATT
0	DL 306	50 04 2121		TLUR 2401	DL TLUR 2401 RT MATT
0	DL 307	50 04 2121		TLUR 2401	DL TLUR 2401 RT MATT
0	DL 308	50 04 2132		TLUG 2401	DL TLUG 2401 GN MATT
0	DL 309	50 04 2132		TLUG 2401	DL TLUG 2401 GN MATT
0	DL 401	50 04 2132		TLUG 2401	DL TLUG 2401 GN MATT
0	DL 402	50 04 2132		TLUG 2401	DL TLUG 2401 GN MATT
0	DL 403	50 04 2133		TLUY 2401	DL TLUY 2401 GB MATT
0	DL 404	50 04 2133		TLUY 2401	DL TLUY 2401 GB MATT
0	DL 405	50 04 2133		TLUY 2401	DL TLUY 2401 GB MATT
0	DL 406	50 04 2121		TLUR 2401	DL TLUR 2401 RT MATT
0	DL 407	50 04 2121		TLUR 2401	DL TLUR 2401 RT MATT
0	DL 408	50 04 2132		TLUG 2401	DL TLUG 2401 GN MATT
0	DL 409	50 04 2132		TLUG 2401	DL TLUG 2401 GN MATT
0	DLZ 101	73 01 0405			LED DOT MATR-DISP 4 DIG 5X7
0	DLZ 102	50 04 2812			DLZ 11"D GB
0	DLZ 104	73 01 0406			LED DOT MATR-DISP 4 DIG 5X7
0	DLZ 105	73 01 0406			LED DOT MATR-DISP 4 DIG 5X7
0	DLZ 201	73 01 0405			LED DOT MATR-DISP 4 DIG 5X7
0	DLZ 202	50 04 2812			DLZ 11"D GB
0	DLZ 204	73 01 0406			LED DOT MATR-DISP 4 DIG 5X7
0	DLZ 205	73 01 0406			LED DOT MATR-DISP 4 DIG 5X7
0	DLZ 301	73 01 0405			LED DOT MATR-DISP 4 DIG 5X7
0	DLZ 302	50 04 2812			DLZ 11"D GB
0	DLZ 304	73 01 0406			LED DOT MATR-DISP 4 DIG 5X7
0	DLZ 305	73 01 0406			LED DOT MATR-DISP 4 DIG 5X7
0	DLZ 401	73 01 0405			LED DOT MATR-DISP 4 DIG 5X7
0	DLZ 402	50 04 2812			DLZ 11"D GB
0	DLZ 404	73 01 0406			LED DOT MATR-DISP 4 DIG 5X7
0	DLZ 405	73 01 0406			LED DOT MATR-DISP 4 DIG 5X7
0	IC 1	50.17.1014		74HC14	IC ... 74 HC 14 .. ,A
0	IC 2	50.17.1014		74HC14	IC ... 74 HC 14 .. ,A
0	MP 1	1.940.711.11 1 pce			FADER FRONT PCB //A
0	MP 2	43.01.0108 1 pce	Label		ESE-WARNschild
0	MP 3	1.940.713.04 1 pce			NR-ETIKETTE 5 * 20
0	MP 4	53.03.0218 264 pc	1p		XIC SINGLE, IN-LINE 1PIN=1STK
0	MP 5	53.03.0240 36 pcs			XLED SINGLE LINE, 2 POL. PRINT
0	MP 6	1.010.091.23 24 pcs			DISTANZSCHEIBE D.90/12* 1.2
0	P 2	54.16.0534		34p	P 1/40", 34 P, AU, PRINT
0	P 4	54.14.2102		16p	P STECKER 16 P,AU,VR.GERADE
0	P 5	54.14.2103		20p	P STECKER 20 P,AU,VR.GERADE
0	P 23	54.16.0540		40p	P 1/40", 40 P, AU, PRINT
0	P 101	54.11.0125		1p	P STIFT,WINKEL 1 PIN=1 STK.
0	P 102	54.11.0125		1p	P STIFT,WINKEL 1 PIN=1 STK.
0	P 103	54.11.0125		1p	P STIFT,WINKEL 1 PIN=1 STK.
0	P 201	54.11.0125		1p	P STIFT,WINKEL 1 PIN=1 STK.
0	P 202	54.11.0125		1p	P STIFT,WINKEL 1 PIN=1 STK.
0	P 203	54.11.0125		1p	P STIFT,WINKEL 1 PIN=1 STK.
0	P 301	54.11.0125		1p	P STIFT,WINKEL 1 PIN=1 STK.
0	P 302	54.11.0125		1p	P STIFT,WINKEL 1 PIN=1 STK.
0	P 303	54.11.0125		1p	P STIFT,WINKEL 1 PIN=1 STK.
0	P 401	54.11.0125		1p	P STIFT,WINKEL 1 PIN=1 STK.
0	P 402	54.11.0125		1p	P STIFT,WINKEL 1 PIN=1 STK.
0	P 403	54.11.0125		1p	P STIFT,WINKEL 1 PIN=1 STK.
0	R 101	57.10.1102		1k0	MF, 1%, 0204
0	R 102	57.10.1102		1k0	MF, 1%, 0204
0	R 103	57.10.1102		1k0	MF, 1%, 0204
0	R 104	57.10.1102		1k0	MF, 1%, 0204
0	RZ 101	57.88.2104		4*100k	2%, SIP 8
0	RZ 103	57.88.2220		4*22R	2%, SIP 8
0	RZ 104	57.88.2220		4*22R	2%, SIP 8
0	RZ 105	57.88.2220		4*22R	2%, SIP 8
0	RZ 106	57.88.2220		4*22R	2%, SIP 8
0	RZ 201	57.88.2104		4*100k	2%, SIP 8
0	RZ 203	57.88.2220		4*22R	2%, SIP 8
0	RZ 204	57.88.2220		4*22R	2%, SIP 8
0	RZ 205	57.88.2220		4*22R	2%, SIP 8
0	RZ 206	57.88.2220		4*22R	2%, SIP 8
0	RZ 301	57.88.2104		4*100k	2%, SIP 8
0	RZ 303	57.88.2220		4*22R	2%, SIP 8
0	RZ 304	57.88.2220		4*22R	2%, SIP 8
0	RZ 305	57.88.2220		4*22R	2%, SIP 8
0	RZ 306	57.88.2220		4*22R	2%, SIP 8
0	RZ 401	57.88.2104		4*100k	2%, SIP 8
0	RZ 403	57.88.2220		4*22R	2%, SIP 8
0	RZ 404	57.88.2220		4*22R	2%, SIP 8

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	RZ 405	57 88 2220	4'22R	2%, SIP 8	
0	RZ 406	57 88 2220	4'22R	2%, SIP 8	
0	S 101	55.15 0644	1'a	S	TASTE 1'A, 5MM, GB/GB
0	S 102	55 15 0655	1'a	S	TASTE 1'A, 5MM, GN/GN
0	S 103	55 15 0744	1'a	S	TASTE 1'A, 12MM, GB/GB
0	S 104	55 15 0722	1'a	S	TASTE 1'A, 12MM, RT/RT
0	S 105	55 15 0744	1'a	S	TASTE 1'A, 12MM, GB/GB
0	S 106	55.15 0722	1'a	S	TASTE 1'A, 12MM, RT/RT
0	S 107	1 940 751 02			ROTARY ENCODER
0	S 201	55 15 0644	1'a	S	TASTE 1'A, 5MM, GB/GB
0	S 202	55 15 0655	1'a	S	TASTE 1'A, 5MM, GN/GN
0	S 203	55 15 0744	1'a	S	TASTE 1'A, 12MM, GB/GB
0	S 204	55 15 0722	1'a	S	TASTE 1'A, 12MM, RT/RT
0	S 205	55 15 0744	1'a	S	TASTE 1'A, 12MM, GB/GB
0	S 206	55 15 0722	1'a	S	TASTE 1'A, 12MM, RT/RT
0	S 207	1 940 751 02			ROTARY ENCODER
0	S 301	55 15 0644	1'a	S	TASTE 1'A, 5MM, GB/GB
0	S 302	55 15 0655	1'a	S	TASTE 1'A, 5MM, GN/GN
0	S 303	55 15 0744	1'a	S	TASTE 1'A, 12MM, GB/GB
0	S 304	55 15 0722	1'a	S	TASTE 1'A, 12MM, RT/RT
0	S 305	55 15 0744	1'a	S	TASTE 1'A, 12MM, GB/GB
0	S 306	55 15 0722	1'a	S	TASTE 1'A, 12MM, RT/RT
0	S 307	1 940 751 02			ROTARY ENCODER
0	S 401	55 15 0644	1'a	S	TASTE 1'A, 5MM, GB/GB
0	S 402	55 15 0655	1'a	S	TASTE 1'A, 5MM, GN/GN
0	S 403	55 15 0744	1'a	S	TASTE 1'A, 12MM, GB/GB
0	S 404	55 15 0722	1'a	S	TASTE 1'A, 12MM, RT/RT
0	S 405	55 15 0744	1'a	S	TASTE 1'A, 12MM, GB/GB
0	S 406	55 15 0722	1'a	S	TASTE 1'A, 12MM, RT/RT
0	S 407	1 940 751 02			ROTARY ENCODER
0	W 101	not used	1-P	MP	RAST LOETKONTAKT D 1 3
0	W 102	not used	1-P	MP	RAST LOETKONTAKT D 1 3
0	W 201	not used	1-P	MP	RAST LOETKONTAKT D 1 3
0	W 202	not used	1-P	MP	RAST LOETKONTAKT D 1 3
0	W 301	not used	1-P	MP	RAST LOETKONTAKT D 1 3
0	W 302	not used	1-P	MP	RAST LOETKONTAKT D 1 3
0	W 401	not used	1-P	MP	RAST LOETKONTAKT D 1 3
0	W 402	not used	1-P	MP	RAST LOETKONTAKT D 1 3

Comments:

End of List

0	W 101	not used	1-P	MP RAST LOETKONTAKT	D 1.3
0	W 102	not used	1-P	MP RAST LOETKONTAKT	D 1.3
0	W 201	not used	1-P	MP RAST LOETKONTAKT	D 1.3
0	W 202	not used	1-P	MP RAST LOETKONTAKT	D 1.3
0	W 301	not used	1-P	MP RAST LOETKONTAKT	D 1.3
0	W 302	not used	1-P	MP RAST LOETKONTAKT	D 1.3
0	W 401	not used	1-P	MP RAST LOETKONTAKT	D 1.3
0	W 402	not used	1-P	MP RAST LOETKONTAKT	D 1.3

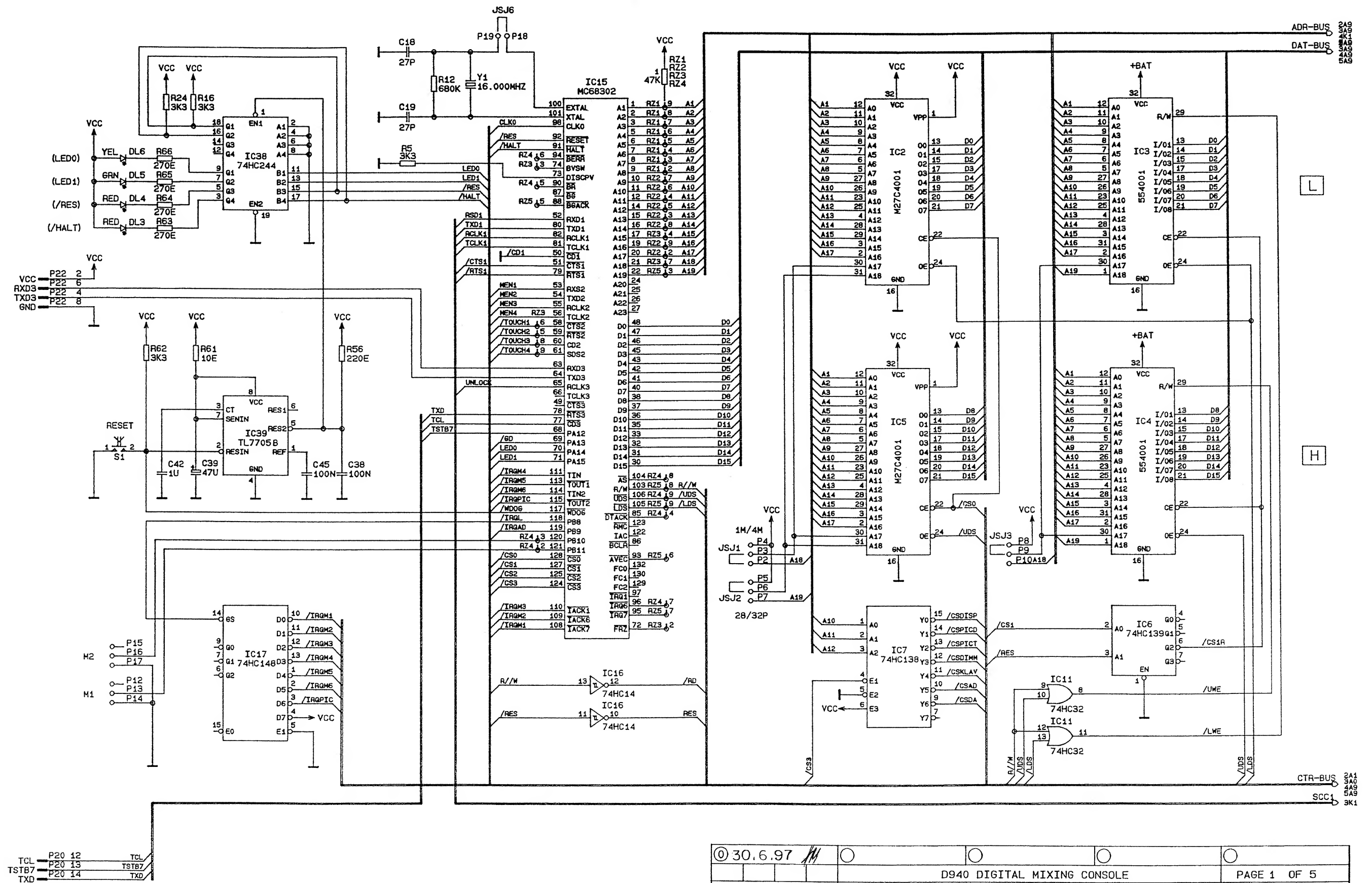
STUDER

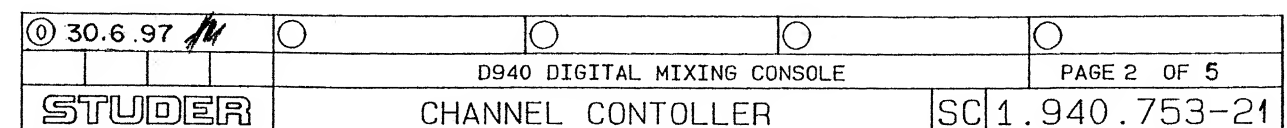
D94I Mixing Console

Channel Controller Board I.940.753.2I

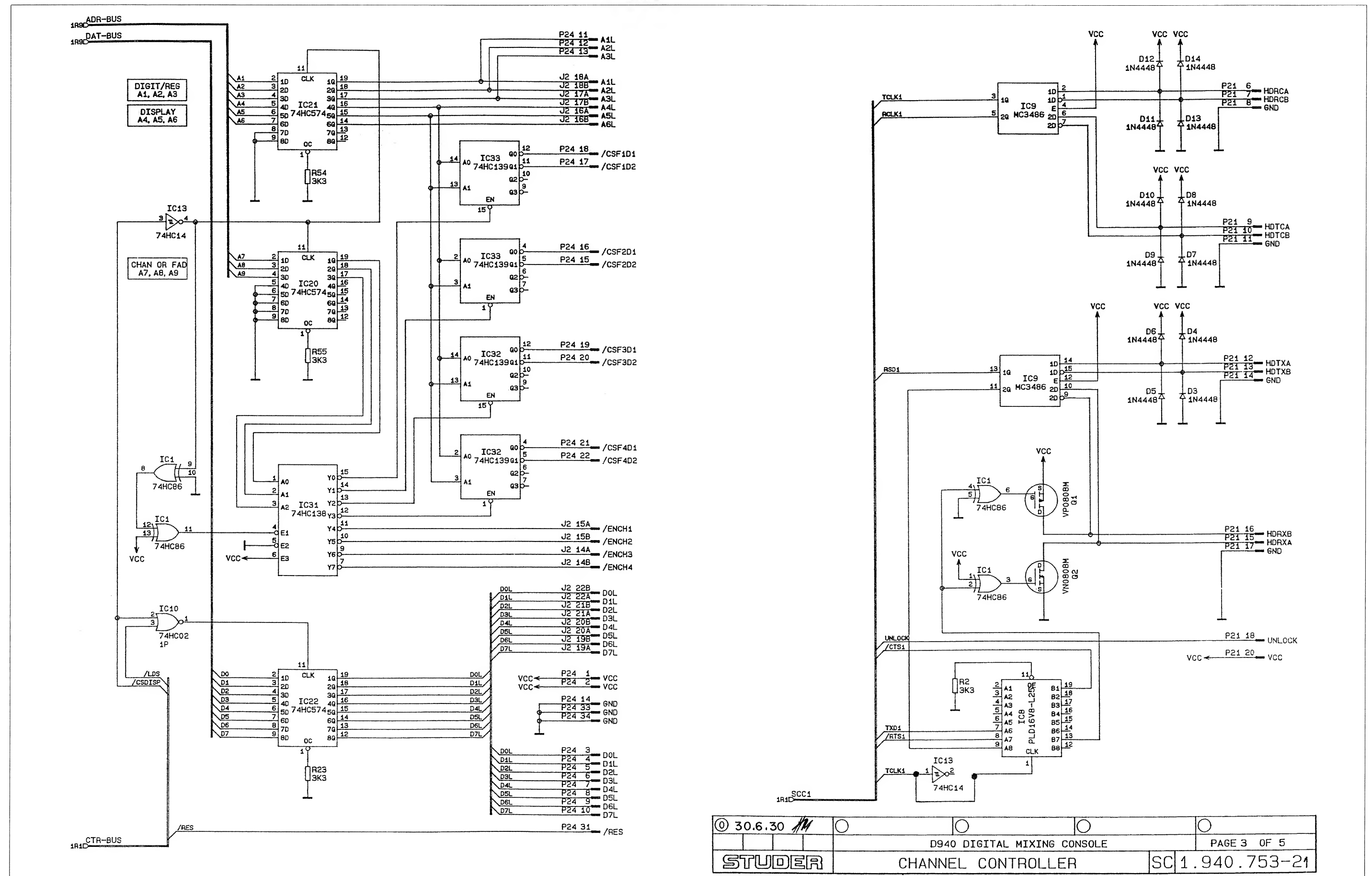
Channel Controller Board I.940.756.2I

Channel Controller Board I.940.764.2I







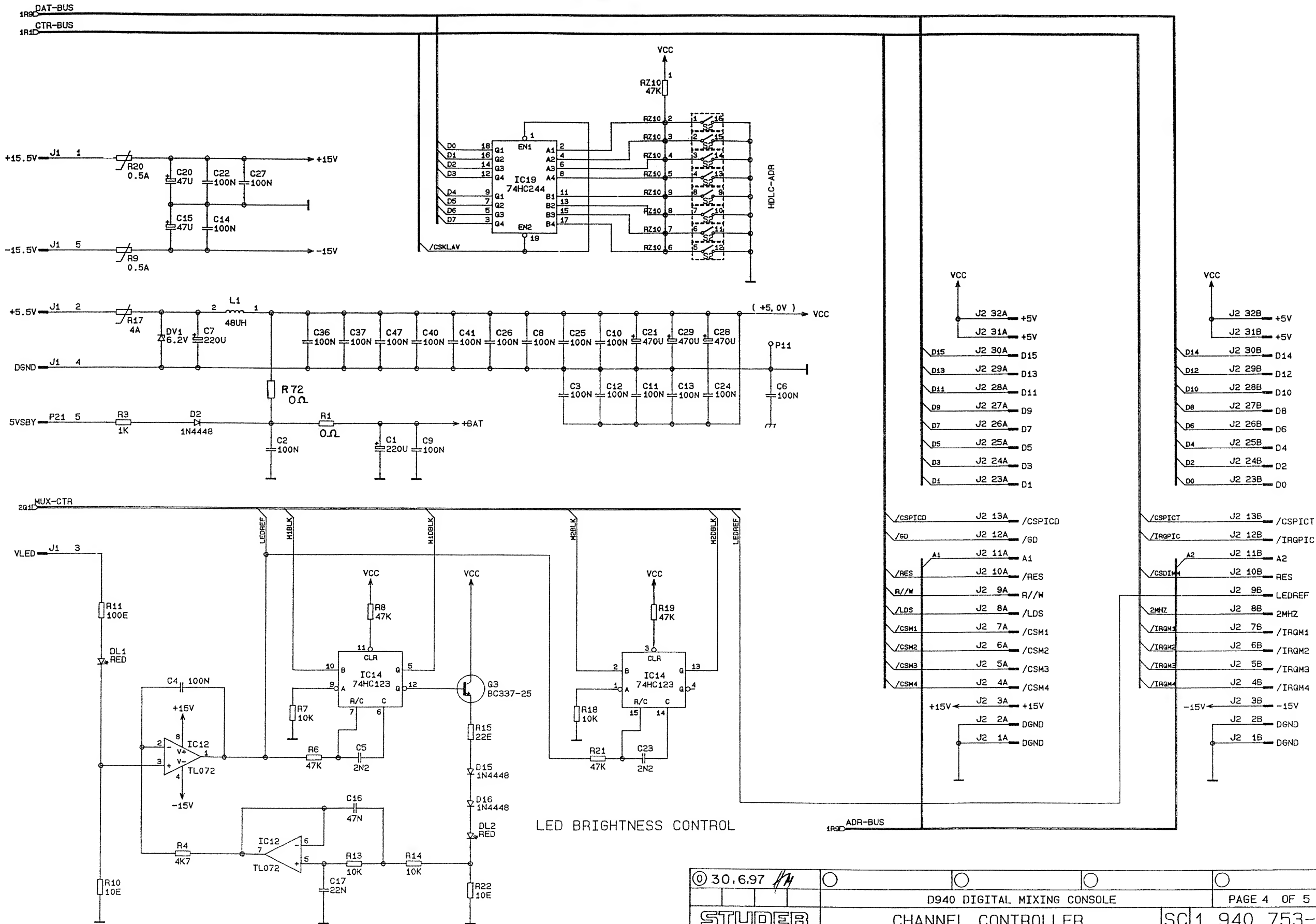




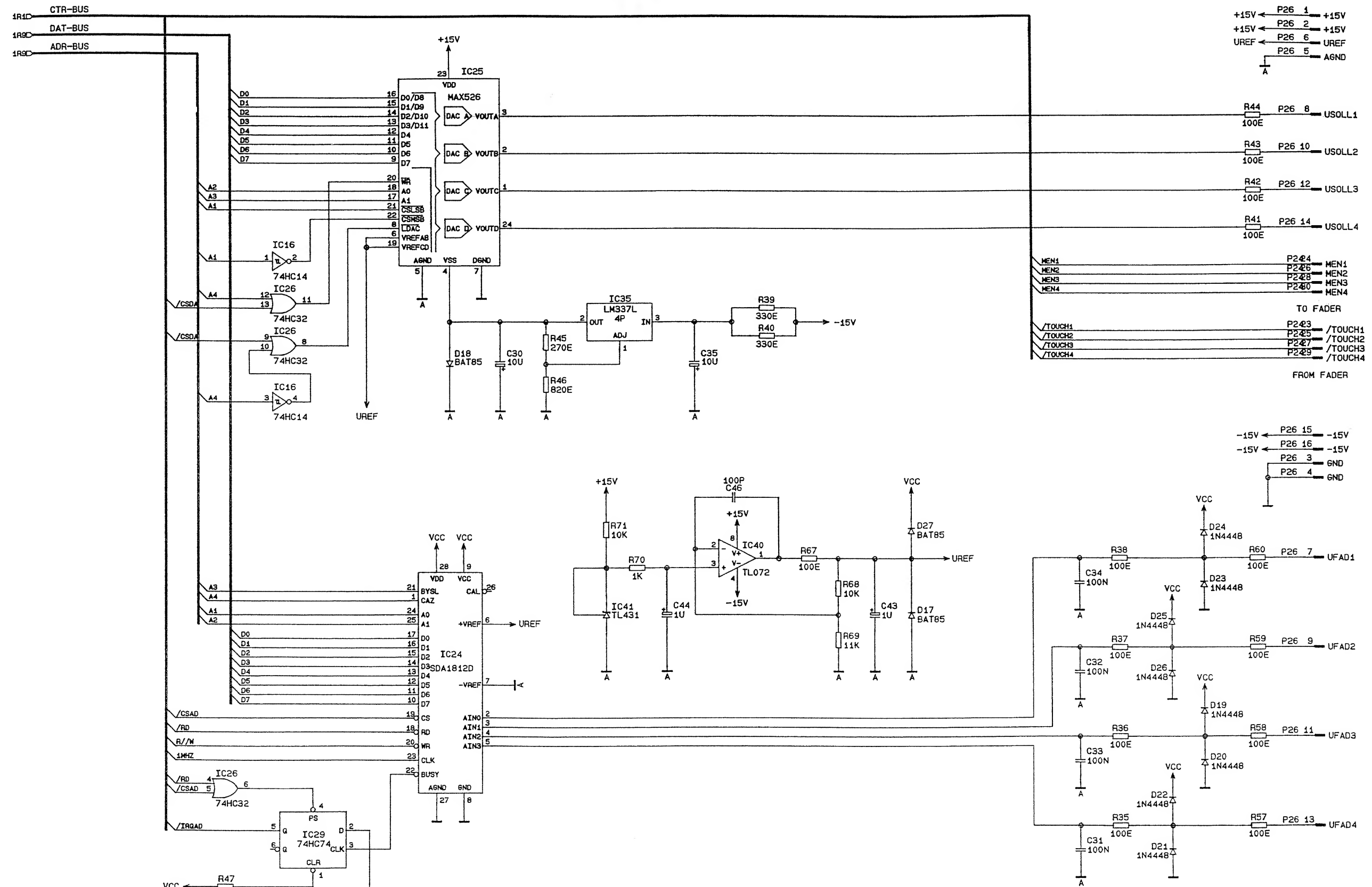
Channel Controller Board 1.940.753.21

Channel Controller Board 1.940.756.21

Channel Controller Board 1.940.764.21

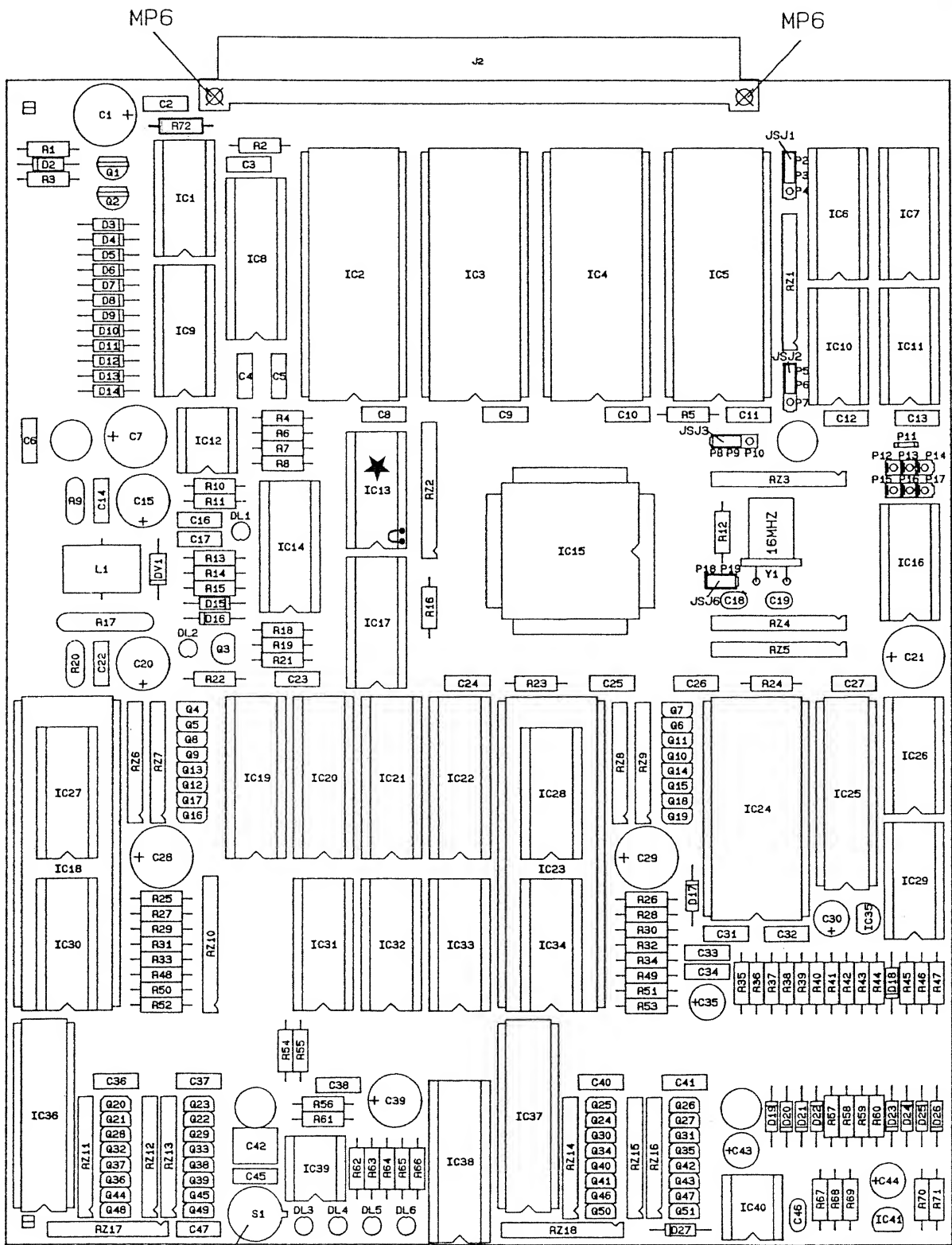


Channel Controller Board 1.940.753.21

**Channel Controller Board 1.940.756.21****Channel Controller Board 1.940.764.21**

③ 30.6.97 <i>HM</i>	○	○	○	○
	D940 DIGITAL MIXING CONSOLE			PAGE 5 OF 5
<b>STUDER</b>	CHANNEL CONTROLLER			SC 1.940.753-21

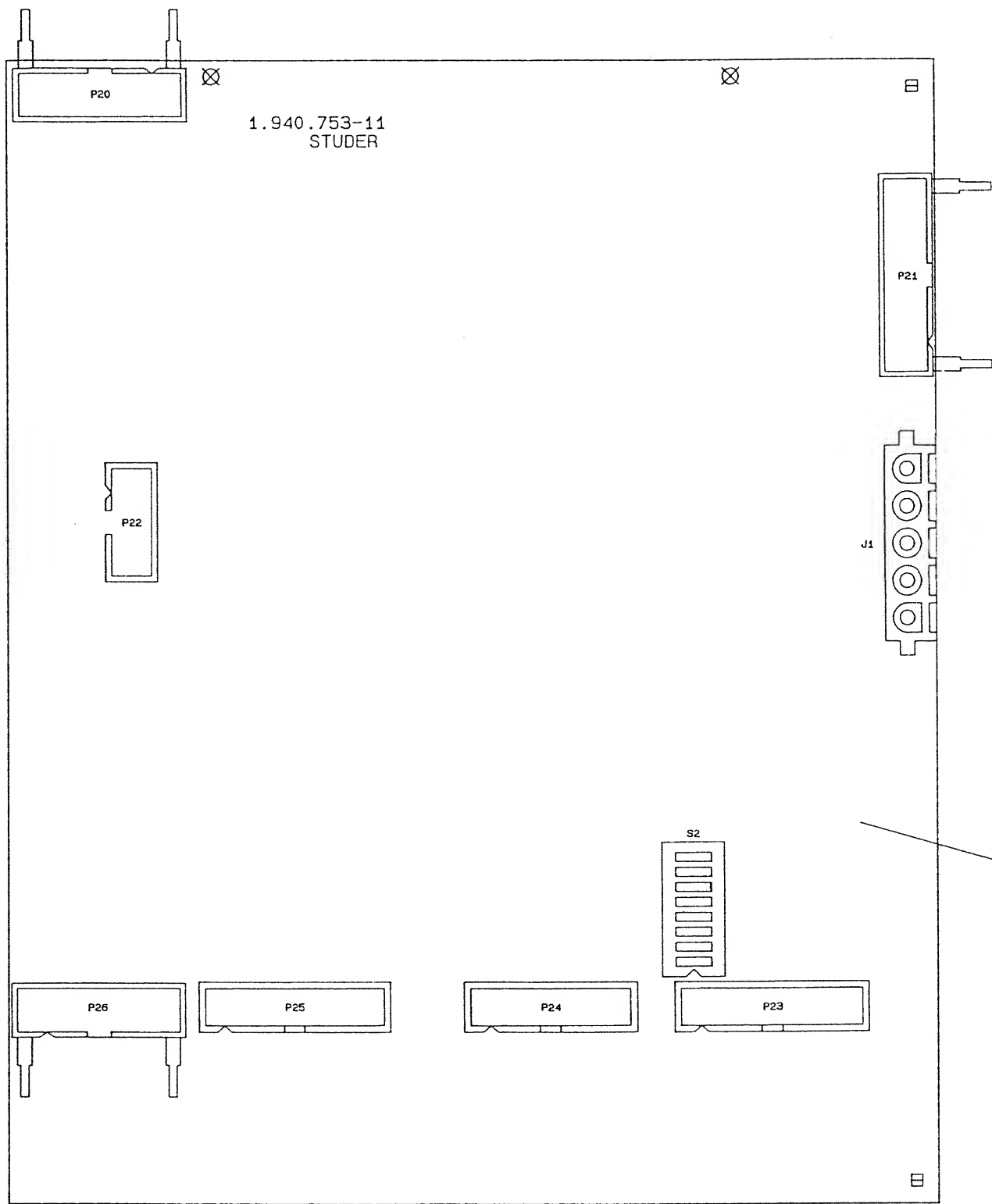




Component side

MP5

★ IC13: Cut pin 2 before soldering, connect pins 1 and 2 with a piece of wire



Solder side

○				
○				
○				
○				
①	30.6.97	16	17	18
IND	DATUM	GEZ.	GEPR.	GES
BLATT 1 VON 1				
STUDER	CHANNEL CONTROLLER	BP	1.940.753-21	



## Channel Controller Board I.940.753.21

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.22.5221	220u		EL 25V, 20%, RM5	0	IC 4	50.14.1010		TC551001-85	SRAM 128K * 8, 85ns
0	C 2	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 5	1.940.935.20		SW940750 HDLC-EPROM	,A
0	C 3	59.06.0104	100n		PETP, 63V, 10%, RM5					50.14.2009	
0	C 4	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 6	50.17.1139		74HC139	IC ... 74 HC 139 .. ,A
0	C 5	59.06.5222	2n2		PETP, 63V, 5%, RM5	0	IC 7	50.17.1138		74HC138	IC ... 74 HC 138 .. ,A
0	C 6	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 8	50.18.0100		PLD16V8	16 V 8 D - 25 LP
0	C 7	59.22.5221	220u		EL 25V, 20%, RM5	0	IC 9	50.15.0104		MC3486	IC MC 3486 P, DS 3486 N,
0	C 8	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 10	50.17.1002		74HC02	IC ... 74 HC 02 .. ,A
0	C 9	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 11	50.17.1032		74HC32	IC ... 74 HC 32 .. ,A
0	C 10	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 12	50.09.0101		TL072	IC TL 072 CN .. ,A
0	C 11	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 13	50.17.1014		74HC14	IC ... 74 HC 14 .. ,A
0	C 12	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 14	50.17.1123		74HC123	IC ... 74 HC 123 .. ,A
0	C 13	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 15	50.63.0100		MC68302	IC MC 68 302 FC 16 C .. ,A
0	C 14	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 16	50.17.1014		74HC14	IC ... 74 HC 14 .. ,A
0	C 15	59.22.6470	47u		EL 40V, 20%, RM5	0	IC 17	50.17.1148		74HC148	IC ... 74 HC 148 .. ,A
0	C 16	59.06.5473	47n		PETP, 63V, 5%, RM5	1	IC 18	50.16.0703		8279	IC TMP 82 C 79 P-2
0	C 17	59.06.5223	22n		PETP, 63V, 5%, RM5	0	IC 19	50.17.1244		74HC244	IC ... 74 HC 244 .. ,A
0	C 18	59.34.2270	27p		CER 63V, 5%, N150	0	IC 20	50.17.1574		74HC574	IC ... 74 HC 574 .. ,A
0	C 19	59.34.2270	27p		CER 63V, 5%, N150	0	IC 21	50.17.1574		74HC574	IC ... 74 HC 574 .. ,A
0	C 20	59.22.6470	47u		EL 40V, 20%, RM5	0	IC 22	50.17.1574		74HC574	IC ... 74 HC 574 .. ,A
0	C 21	59.22.3471	470u		EL 10V, 20%, RM5	1	IC 23	50.16.0703		8279	IC TMP 82 C 79 P-2
0	C 22	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 24	50.19.0204			IC ADS 7803 BP .. ,A
0	C 23	59.06.5222	2n2		PETP, 63V, 5%, RM5	0	IC 25	50.19.0113		MAX526D	D/A Converter 12 Bit
0	C 24	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 26	50.17.1032		74HC32	IC ... 74 HC 32 .. ,A
0	C 25	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 27	50.17.1138		74HC138	IC ... 74 HC 138 .. ,A
0	C 26	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 28	50.17.1163		74HC163	IC ... 74 HC 163 .. ,A
0	C 27	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 29	50.17.1074		74HC74	IC ... 74 HC 74 .. ,A
0	C 28	59.22.3471	470u		EL 10V, 20%, RM5	0	IC 30	50.17.1138		74HC138	IC ... 74 HC 138 .. ,A
0	C 29	59.22.3471	470u		EL 10V, 20%, RM5	0	IC 31	50.17.1138		74HC138	IC ... 74 HC 138 .. ,A
0	C 30	59.22.6100	10u		EL 35V, 20%, RM5	0	IC 32	50.17.1139		74HC139	IC ... 74 HC 139 .. ,A
0	C 31	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 33	50.17.1139		74HC139	IC ... 74 HC 139 .. ,A
0	C 32	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 34	50.17.1138		74HC138	IC ... 74 HC 138 .. ,A
0	C 33	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 35	50.10.0109		LM337L	IC LM 337 LZ,
0	C 34	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 36	50.17.1154		74HC154	4-to16 Line driver, DIP 24-300
0	C 35	59.22.6100	10u		EL 35V, 20%, RM5	0	IC 37	50.17.1154		74HC154	4-to16 Line driver, DIP 24-300
0	C 36	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 38	50.17.1244		74HC244	IC ... 74 HC 244 .. ,A
0	C 37	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 39	50.11.0157		TL7705B	IC TL 7705 BCP,
0	C 38	59.06.5104	100n		PETP, 63V, 5%, RM5	0	IC 40	50.09.0101		TL072	IC TL 072 CN .. ,A
0	C 39	59.22.6470	47u		EL 40V, 20%, RM5	0	IC 41	50.10.0106		TL431	IC TL 431 CLP,
0	C 40	59.06.0104	100n		PETP, 63V, 10%, RM5						
0	C 41	59.06.0104	100n		PETP, 63V, 10%, RM5	0	J 1	54.25.0005		5p	Buchse, 16A, vertikal, PCB
0	C 42	59.06.5105	1u0		PETP, 50V, 5%, RM5	0	J 2	54.11.2010		64p	EU-Q 2*32p
0	C 43	59.22.8109	1u		EL 50V, 20%, RM5						
0	C 44	59.22.8109	1u		EL 50V, 20%, RM5	0	JSJ 1	54.01.0021		Jumper	0.63 * 0.63mm
0	C 45	59.06.5104	100n		PETP, 63V, 5%, RM5	0	JSJ 2	54.01.0021		Jumper	0.63 * 0.63mm
0	C 46	59.34.4101	100p		CER 63V, 5%, N750	0	JSJ 3	54.01.0021		Jumper	0.63 * 0.63mm
0	C 47	59.06.0104	100n		PETP, 63V, 10%, RM5	0	JSJ 6	54.01.0021		Jumper	0.63 * 0.63mm
0	D 2	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35						
0	D 3	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	L 1	62.03.0010		48uH	2A Toroid Chocke
0	D 4	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35						
0	D 5	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 1	1.940.753.11	1 pce		CHANNEL CONTROLLER PCB //I
0	D 6	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 2	1.940.753.04	1 pce		NR.-ETIKETTE 5 * 20
0	D 7	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 3	1.101.001.20	1 pce	Label	TEXT-ETIK. 5*20 HARDWARE -20
0	D 8	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 4	43.01.0108	1 pce	Label	ESE-WARNSCHILD
0	D 9	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 5	1.010.015.50	1 pce	Spacer	ISOLIER-SCHEIBE ZU T0 5
0	D 10	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 6	28.99.0119	2 pcs		ROHRNIETTE D 2.5*0.15* 9
0	D 11	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35						
0	D 12	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 2	54.01.0020		1p	Pin 0.63*0.63
0	D 13	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 3	54.01.0020		1p	Pin 0.63*0.63
0	D 14	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 4	54.01.0020		1p	Pin 0.63*0.63
0	D 15	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 5	54.01.0020		1p	Pin 0.63*0.63
0	D 16	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 6	54.01.0020		1p	Pin 0.63*0.63
0	D 17	50.04.0127	BAT85		200mA, Schottky	0	P 7	54.01.0020		1p	Pin 0.63*0.63
0	D 18	50.04.0127	BAT85		200mA, Schottky	0	P 8	54.01.0020		1p	Pin 0.63*0.63
0	D 19	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 9	54.01.0020		1p	Pin 0.63*0.63
0	D 20	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 10	54.01.0020		1p	Pin 0.63*0.63
0	D 21	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 11	54.02.0320		1p	Flatpin, 2.8*0.8mm
0	D 22	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 12	54.01.0020		1p	Pin 0.63*0.63
0	D 23	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 13	54.01.0020		1p	Pin 0.63*0.63
0	D 24	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 14	54.01.0020		1p	Pin 0.63*0.63
0	D 25	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 15	54.01.0020		1p	Pin 0.63*0.63
0	D 26	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 16	54.01.0020		1p	Pin 0.63*0.63
0	D 27	50.04.0127	BAT85		200mA, Schottky	0	P 17	54.01.0020		1p	Pin 0.63*0.63
						0	P 18	54.01.0020		1p	Pin 0.63*0.63
						0	P 19	54.01.0020		1p	Pin 0.63*0.63
0	DL 1	50.04.2129	LS3360		DL LS 3360 , RT DIFF	0	P 20	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
0	DL 2	50.04.2129	LS3360		DL LS 3360 , RT DIFF	0	P 21	54.14.2103		20p	P STECKER 20 P,AU,VR,GERADE
0	DL 3	50.04.2129	LS3360		DL LS 3360 , RT DIFF	0	P 22	54.14.2001		10p	1/20" Au, gerade, ohne Verrieg
0	DL 4	50.04.2129	LS3360		DL LS 3360 , RT DIFF	0	P 23	54.16.0540		40p	P 1/40", 40 P, AU, PRINT
0	DL 5	50.04.2131	LG3360		DL LG 3360 , GN DIFF	0	P 24	54.16.0534		34p	P 1/40", 34 P, AU, PRINT
0	DL 6	50.04.2130	LY3360		DL LY 3360 , GB DIFF	0	P 25	54.16.0540		40p	P 1/40", 40 P, AU, PRINT
						0	P 26	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
0	DV 1	50.04.1511	6V2		Zener, 5%, 1.3W, DO-41						
0	IC 1	50.17.1086		74HC86	IC ... 74 HC 86 .. ,A	0	Q 1	50.03.1554		VP0808M	VP 0808 M
0	IC 2	1.940.935.20			SW940750 HDLC-EPROM	0	Q 2	50.03.1505		VN0808M	VN 0808 M, ZVN 0108 A
					50.14.2009	0	Q 3	50.43.0340			Q BC 337-25,
0	IC 3	50.14.1010		TC551001-85	SRAM 128K * 8, 85ns	0	Q 4	50.03.0523		ZTX651	ZTX 651



## Channel Controller Board 1.940.753.21

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	Q 5	50.03.0523		ZTX651	ZTX 651	0	R 40	57.11.3331		330R	MF, 1%, 0207
0	Q 6	50.03.0523		ZTX651	ZTX 651	0	R 41	57.11.3101		100R	MF, 1%, 0207
0	Q 7	50.03.0523		ZTX651	ZTX 651	0	R 42	57.11.3101		100R	MF, 1%, 0207
0	Q 8	50.03.0523		ZTX651	ZTX 651	0	R 43	57.11.3101		100R	MF, 1%, 0207
0	Q 9	50.03.0523		ZTX651	ZTX 651	0	R 44	57.11.3101		100R	MF, 1%, 0207
0	Q 10	50.03.0523		ZTX651	ZTX 651	0	R 45	57.11.3271		270R	MF, 1%, 0207
0	Q 11	50.03.0523		ZTX651	ZTX 651	0	R 46	57.11.3821		820R	MF, 1%, 0207
0	Q 12	50.03.0523		ZTX651	ZTX 651	0	R 47	57.11.3473		47k	MF, 1%, 0207
0	Q 13	50.03.0523		ZTX651	ZTX 651	0	R 48	57.11.3220		22R	MF, 1%, 0207
0	Q 14	50.03.0523		ZTX651	ZTX 651	0	R 49	57.11.3220		22R	MF, 1%, 0207
0	Q 15	50.03.0523		ZTX651	ZTX 651	0	R 50	57.11.3220		22R	MF, 1%, 0207
0	Q 16	50.03.0523		ZTX651	ZTX 651	0	R 51	57.11.3220		22R	MF, 1%, 0207
0	Q 17	50.03.0523		ZTX651	ZTX 651	0	R 52	57.11.3220		22R	MF, 1%, 0207
0	Q 18	50.03.0523		ZTX651	ZTX 651	0	R 53	57.11.3220		22R	MF, 1%, 0207
0	Q 19	50.03.0523		ZTX651	ZTX 651	0	R 54	57.11.3332		3k3	MF, 1%, 0207
0	Q 20	50.03.0352		ZTX751S	ZTX 751 S	0	R 55	57.11.3332		3k3	MF, 1%, 0207
0	Q 21	50.03.0352		ZTX751S	ZTX 751 S	0	R 56	57.11.3221		220R	MF, 1%, 0207
0	Q 22	50.03.0352		ZTX751S	ZTX 751 S	0	R 57	57.11.3101		100R	MF, 1%, 0207
0	Q 23	50.03.0352		ZTX751S	ZTX 751 S	0	R 58	57.11.3101		100R	MF, 1%, 0207
0	Q 24	50.03.0352		ZTX751S	ZTX 751 S	0	R 59	57.11.3101		100R	MF, 1%, 0207
0	Q 25	50.03.0352		ZTX751S	ZTX 751 S	0	R 60	57.11.3101		100R	MF, 1%, 0207
0	Q 26	50.03.0352		ZTX751S	ZTX 751 S	0	R 61	57.11.3100		10R	MF, 1%, 0207
0	Q 27	50.03.0352		ZTX751S	ZTX 751 S	0	R 62	57.11.3332		3k3	MF, 1%, 0207
0	Q 28	50.03.0352		ZTX751S	ZTX 751 S	0	R 63	57.11.3271		270R	MF, 1%, 0207
0	Q 29	50.03.0352		ZTX751S	ZTX 751 S	0	R 64	57.11.3271		270R	MF, 1%, 0207
0	Q 30	50.03.0352		ZTX751S	ZTX 751 S	0	R 65	57.11.3271		270R	MF, 1%, 0207
0	Q 31	50.03.0352		ZTX751S	ZTX 751 S	0	R 66	57.11.3271		270R	MF, 1%, 0207
0	Q 32	50.03.0352		ZTX751S	ZTX 751 S	0	R 67	57.11.3101		100R	MF, 1%, 0207
0	Q 33	50.03.0352		ZTX751S	ZTX 751 S	0	R 68	57.11.3103		10k	MF, 1%, 0207
0	Q 34	50.03.0352		ZTX751S	ZTX 751 S	0	R 69	57.11.3113		11k	MF, 1%, 0207
0	Q 35	50.03.0352		ZTX751S	ZTX 751 S	0	R 70	57.11.3102		1k0	MF, 1%, 0207
0	Q 36	50.03.0352		ZTX751S	ZTX 751 S	0	R 71	57.11.3103		10k	MF, 1%, 0207
0	Q 37	50.03.0352		ZTX751S	ZTX 751 S	0	R 72	57.11.3000		0R0	MF, 0207
0	Q 38	50.03.0352		ZTX751S	ZTX 751 S						
0	Q 39	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 1	57.88.4473		8*47k	2%, SIP 9
0	Q 40	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 2	57.88.4473		8*47k	2%, SIP 9
0	Q 41	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 3	57.88.4473		8*47k	2%, SIP 9
0	Q 42	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 4	57.88.4473		8*47k	2%, SIP 9
0	Q 43	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 5	57.88.4473		8*47k	2%, SIP 9
0	Q 44	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 6	57.88.2221		4*220R	2%, SIP 8
0	Q 45	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 7	57.88.2221		4*220R	2%, SIP 8
0	Q 46	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 8	57.88.2221		4*220R	2%, SIP 8
0	Q 47	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 9	57.88.2221		4*220R	2%, SIP 8
0	Q 48	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 10	57.88.4473		8*47k	2%, SIP 9
0	Q 49	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 11	57.88.2221		4*220R	2%, SIP 8
0	Q 50	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 12	57.88.2221		4*220R	2%, SIP 8
0	Q 51	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 13	57.88.2221		4*220R	2%, SIP 8
						0	RZ 14	57.88.2221		4*220R	2%, SIP 8
0	R 1	57.11.3000		0R0	MF, 0207	0	RZ 15	57.88.2221		4*220R	2%, SIP 8
0	R 2	57.11.3332		3k3	MF, 1%, 0207	0	RZ 16	57.88.2221		4*220R	2%, SIP 8
0	R 3	57.11.3102		1k0	MF, 1%, 0207	0	RZ 17	57.88.2221		4*220R	2%, SIP 8
0	R 4	57.11.3472		4k7	MF, 1%, 0207	0	RZ 18	57.88.2221		4*220R	2%, SIP 8
0	R 5	57.11.3332		3k3	MF, 1%, 0207						
0	R 6	57.11.3473		47k	MF, 1%, 0207	0	S 1	55.03.0122		1*a	S 1 TASTE, 1*A, PRINT,IMPULS
0	R 7	57.11.3103		10k	MF, 1%, 0207	0	S 2	55.01.0168		8*a	SZ , 8*A, DIL
0	R 8	57.11.3473		47k	MF, 1%, 0207						
0	R 9	57.92.7013		0.5A	POLY- PTC, 60V	0	XIC 2	53.03.0184		32p	DIL 0.6", lot, gerade
0	R 10	57.11.3100		10R	MF, 1%, 0207	0	XIC 3	53.03.0184		32p	DIL 0.6", lot, gerade
0	R 11	57.11.3101		100R	MF, 1%, 0207	0	XIC 4	53.03.0184		32p	DIL 0.6", lot, gerade
0	R 12	57.11.3684		680k	MF, 1%, 0207	0	XIC 5	53.03.0184		32p	DIL 0.6", lot, gerade
0	R 13	57.11.3103		10k	MF, 1%, 0207	0	XIC 8	53.03.0165		20p	DIL 0.3", lot, gerade
0	R 14	57.11.3103		10k	MF, 1%, 0207	0	XIC 9	53.03.0168		16p	DIL 0.3", lot, gerade
0	R 15	57.11.3220		22R	MF, 1%, 0207	0	XIC 18	53.03.0218		1p	single-in-line
0	R 16	57.11.3332		3k3	MF, 1%, 0207	0	XIC 23	53.03.0218		1p	single-in-line
0	R 17	57.92.7058		4.0A	POLY- PTC, 30V	0	XIC 24	53.03.0173		28p	DIL 0.6", lot, gerade
0	R 18	57.11.3103		10k	MF, 1%, 0207	0	XIC 25	53.03.0182		24p	DIL 0.3", lot, gerade
0	R 19	57.11.3473		47k	MF, 1%, 0207						
0	R 20	57.92.7013		0.5A	POLY- PTC, 60V	0	Y 1	89.01.1009		16.000MHz	16.000 000 MHz, HC 49/U
0	R 21	57.11.3473		47k	MF, 1%, 0207						
0	R 22	57.11.3100		10R	MF, 1%, 0207						
0	R 23	57.11.3332		3k3	MF, 1%, 0207						
0	R 24	57.11.3332		3k3	MF, 1%, 0207						
0	R 25	57.11.3220		22R	MF, 1%, 0207						
0	R 26	57.11.3220		22R	MF, 1%, 0207						
0	R 27	57.11.3220		22R	MF, 1%, 0207						
0	R 28	57.11.3220		22R	MF, 1%, 0207						
0	R 29	57.11.3220		22R	MF, 1%, 0207						
0	R 30	57.11.3220		22R	MF, 1%, 0207						
0	R 31	57.11.3220		22R	MF, 1%, 0207						
0	R 32	57.11.3220		22R	MF, 1%, 0207						
0	R 33	57.11.3220		22R	MF, 1%, 0207						
0	R 34	57.11.3220		22R	MF, 1%, 0207						
0	R 35	57.11.3101		100R	MF, 1%, 0207						
0	R 36	57.11.3101		100R	MF, 1%, 0207						
0	R 37	57.11.3101		100R	MF, 1%, 0207						
0	R 38	57.11.3101		100R	MF, 1%, 0207						
0	R 39	57.11.3331		330R	MF, 1%, 0207						

End of List

## Comments:

Process of 8279 has been changed to CMOS technology



## Channel Controller Board I.940.756.2I

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.22.5221	220u		EL 25V, 20%, RM5	0	IC 4	50.14.1010		TC551001-85	SRAM 128K * 8, 85ns
0	C 2	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 5	50.14.2009		27C1001	EPROM 128K * 8
0	C 3	59.06.0104	100n		PETP, 63V, 10%, RM5						SW HDLC EPROM 1.941.710.xx
0	C 4	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 6	50.17.1139		74HC139	IC ... 74 HC 139 .., ,A
0	C 5	59.06.5222	2n2		PETP, 63V, 5%, RM5	0	IC 7	50.17.1138		74HC138	IC ... 74 HC 138 .., ,A
0	C 6	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 8	50.18.0100		PLD16V8	16 V 8 D - 25 LP
0	C 7	59.22.5221	220u		EL 25V, 20%, RM5						DIP20, SW753 HDLC-GAL (1.940.915.20)
0	C 8	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 9	50.15.0104		MC3486	IC MC 3486 P, DS 3486 N,
0	C 9	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 10	50.17.1002		74HC02	IC ... 74 HC 02 .., ,A
0	C 10	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 11	50.17.1032		74HC32	IC ... 74 HC 32 .., ,A
0	C 11	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 12	50.09.0101		TL072	IC TL 072 CN .., ,A
0	C 12	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 13	50.17.1014		74HC14	IC ... 74 HC 14 .., ,A
0	C 13	59.06.0104	100n		PETP, 63V, 10%, RM5						SEE COMMENT
0	C 14	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 14	50.17.1123		74HC123	IC ... 74 HC 123 .., ,A
0	C 15	59.22.6470	47u		EL 40V, 20%, RM5	0	IC 15	50.63.0100		MC68302	IC MC 68 302 FC 16 C .., ,A
0	C 16	59.06.5473	47n		PETP, 63V, 5%, RM5	0	IC 16	50.17.1014		74HC14	IC ... 74 HC 14 .., ,A
0	C 17	59.06.5223	22n		PETP, 63V, 5%, RM5	0	IC 17	50.17.1148		74HC148	IC ... 74 HC 148 .., ,A
0	C 18	59.34.2270	27p		CER 63V, 5%, N150	0	IC 18	50.16.0111		8279	IC IP 8279-5, ID 8279-5,
0	C 19	59.34.2270	27p		CER 63V, 5%, N150	0	IC 19	50.17.1244		74HC244	IC ... 74 HC 244 .., ,A
0	C 20	59.22.6470	47u		EL 40V, 20%, RM5	0	IC 20	50.17.1574		74HC574	IC ... 74 HC 574 .., ,A
0	C 21	59.22.3471	470u		EL 10V, 20%, RM5	0	IC 21	50.17.1574		74HC574	IC ... 74 HC 574 .., ,A
0	C 22	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 22	50.17.1574		74HC574	IC ... 74 HC 574 .., ,A
0	C 23	59.06.5222	2n2		PETP, 63V, 5%, RM5	0	IC 23	50.16.0111		8279	IC IP 8279-5, ID 8279-5,
0	C 24	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 24	50.19.0204		ADS7832	
0	C 25	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 25	50.19.0113		MAX526D	D/A Converter 12 Bit
0	C 26	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 26	50.17.1032		74HC32	IC ... 74 HC 32 .., ,A
0	C 27	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 27	50.17.1138		74HC138	IC ... 74 HC 138 .., ,A
0	C 28	59.22.3471	470u		EL 10V, 20%, RM5	0	IC 28	50.17.1163		74HC163	IC ... 74 HC 163 .., ,A
0	C 29	59.22.3471	470u		EL 10V, 20%, RM5	0	IC 29	50.17.1074		74HC74	IC ... 74 HC 74 .., ,A
0	C 30	59.22.6100	10u		EL 35V, 20%, RM5	0	IC 30	50.17.1138		74HC138	IC ... 74 HC 138 .., ,A
0	C 31	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 31	50.17.1138		74HC138	IC ... 74 HC 138 .., ,A
0	C 32	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 32	50.17.1139		74HC139	IC ... 74 HC 139 .., ,A
0	C 33	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 33	50.17.1139		74HC139	IC ... 74 HC 139 .., ,A
0	C 34	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 34	50.17.1138		74HC138	IC ... 74 HC 138 .., ,A
0	C 35	59.22.6100	10u		EL 35V, 20%, RM5	0	IC 35	50.10.0109		LM337L	IC LM 337 LZ,
0	C 36	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 36	50.17.1154		74HC154	4-to16 Line driver, DIP 24-300
0	C 37	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 37	50.17.1154		74HC154	4-to16 Line driver, DIP 24-300
0	C 38	59.06.5104	100n		PETP, 63V, 5%, RM5	0	IC 38	50.17.1244		74HC244	IC ... 74 HC 244 .., ,A
0	C 39	59.22.6470	47u		EL 40V, 20%, RM5	0	IC 39	50.11.0157		TL7705B	IC TL 7705 BCP,
0	C 40	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 40	50.09.0101		TL072	IC TL 072 CN .., ,A
0	C 41	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 41	50.10.0106		TL431	IC TL 431 CLP,
0	C 42	59.06.5105	1u0		PETP, 50V, 5%, RM5						
0	C 43	59.22.8109	1u		EL 50V, 20%, RM5	0	J 1	54.25.0005		5p	Buchse, 16A, vertikal, PCB
0	C 44	59.22.8109	1u		EL 50V, 20%, RM5	0	J 2	54.11.0130	32 pcs	2p	P STIFT,2R WNK2 2 PIN=1 STK.
0	C 45	59.06.5104	100n		PETP, 63V, 5%, RM5						
0	C 46	59.34.4101	100p		CER 63V, 5%, N750	0	JSJ 1	54.01.0021		Jumper	0.63 * 0.63mm
0	C 47	59.06.0104	100n		PETP, 63V, 10%, RM5	0	JSJ 2	54.01.0021		Jumper	0.63 * 0.63mm
0	D 2	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	JSJ 3	54.01.0021		Jumper	0.63 * 0.63mm
0	D 3	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	JSJ 6	54.01.0021		Jumper	0.63 * 0.63mm
0	D 4	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35						
0	D 5	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	L 1	62.03.0010		48uH	2A Toroid Chocke
0	D 6	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35						
0	D 7	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 1	1.940.753.11	1 mp		CHANNEL CONTROLLER PCB /A
0	D 8	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 2	1.940.753.04	1 mp		NR.-ETIKETTE 5 * 20
0	D 9	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 3	1.101.001.20	1 mp	Label	TEXT-ETIK 5*20 HARDWARE -20
0	D 10	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 4	43.01.0108	1 mp	Label	ESE-WARN-SCHILD
0	D 11	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 5	1.010.015.50	1 mp	Spacer	ISOLIER-SCHLEIBE ZU T0 5
0	D 12	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	MP 6	not used	2 mp		ROHRNIETE D 2.5*0.15* 9
0	D 13	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35						
0	D 14	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 2	54.01.0020		1p	Pin 0.63*0.63
0	D 15	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 3	54.01.0020		1p	Pin 0.63*0.63
0	D 16	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 4	54.01.0020		1p	Pin 0.63*0.63
0	D 17	50.04.0127	BAT85		200mA, Schottky	0	P 5	54.01.0020		1p	Pin 0.63*0.63
0	D 18	50.04.0127	BAT85		200mA, Schottky	0	P 6	54.01.0020		1p	Pin 0.63*0.63
0	D 19	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 7	54.01.0020		1p	Pin 0.63*0.63
0	D 20	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 8	54.01.0020		1p	Pin 0.63*0.63
0	D 21	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 9	54.01.0020		1p	Pin 0.63*0.63
0	D 22	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 10	54.01.0020		1p	Pin 0.63*0.63
0	D 23	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 11	54.02.0320		1p	Flatpin, 2.8*0.8mm
0	D 24	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 12	54.01.0020		1p	Pin 0.63*0.63
0	D 25	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 13	54.01.0020		1p	Pin 0.63*0.63
0	D 26	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	P 14	54.01.0020		1p	Pin 0.63*0.63
0	D 27	50.04.0127	BAT85		200mA, Schottky	0	P 15	54.01.0020		1p	Pin 0.63*0.63
0	DL 1	50.04.2129	LS3360		DL LS 3360, RT DIFF	0	P 16	54.01.0020		1p	Pin 0.63*0.63
0	DL 2	50.04.2129	LS3360		DL LS 3360, RT DIFF	0	P 17	54.01.0020		1p	Pin 0.63*0.63
0	DL 3	50.04.2129	LS3360		DL LS 3360, RT DIFF	0	P 18	54.01.0020		1p	Pin 0.63*0.63
0	DL 4	50.04.2129	LS3360		DL LS 3360, RT DIFF	0	P 19	54.01.0020		1p	Pin 0.63*0.63
0	DL 5	50.04.2131	LG3360		DL LG 3360, GN DIFF	0	P 20	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
0	DL 6	50.04.2130	LY3360		DL LY 3360, GB DIFF	0	P 21	54.14.2103		20p	P STECKER 20 P,AU,VR,GERADE
0	DV 1	50.04.1511	6V2		Zener, 5%, 1.3W, DO-41	0	P 22	54.14.2001		10p	1/20" Au, gerade, ohne Verrieg
0	IC 1	50.17.1086	74HC86		IC ... 74 HC 86 .., ,A	0	P 23	54.16.0540		40p	P 1/40", 40 P, AU, PRINT
0	IC 2	50.14.2009	27C1001		EPROM 128K * 8	0	P 24	54.16.0534		34p	P 1/40", 34 P, AU, PRINT
					SW HDLC EPROM 1.941.710.xx	0	P 25	54.16.0540		40p	P 1/40", 40 P, AU, PRINT
0	IC 3	50.14.1010	TC551001-85		SRAM 128K * 8, 85ns	0	P 26	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE
						0	Q 1	50.03.1554		VP0808M	VP 0808 M
						0	Q 2	50.03.1505		VN0808M	VN 0808 M, ZVN 0108 A



## Channel Controller Board 1.940.756.21

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	Q 3	50.43.0340			Q BC 337-25,	0	R 38	57.11.3101	100R	MF, 1%, 0207	
0	Q 4	50.03.0523	ZTX651		ZTX 651	0	R 39	57.11.3331	330R	MF, 1%, 0207	
0	Q 5	50.03.0523	ZTX651		ZTX 651	0	R 40	57.11.3331	330R	MF, 1%, 0207	
0	Q 6	50.03.0523	ZTX651		ZTX 651	0	R 41	57.11.3101	100R	MF, 1%, 0207	
0	Q 7	50.03.0523	ZTX651		ZTX 651	0	R 42	57.11.3101	100R	MF, 1%, 0207	
0	Q 8	50.03.0523	ZTX651		ZTX 651	0	R 43	57.11.3101	100R	MF, 1%, 0207	
0	Q 9	50.03.0523	ZTX651		ZTX 651	0	R 44	57.11.3101	100R	MF, 1%, 0207	
0	Q 10	50.03.0523	ZTX651		ZTX 651	0	R 45	57.11.3271	270R	MF, 1%, 0207	
0	Q 11	50.03.0523	ZTX651		ZTX 651	0	R 46	57.11.3821	820R	MF, 1%, 0207	
0	Q 12	50.03.0523	ZTX651		ZTX 651	0	R 47	57.11.3473	47k	MF, 1%, 0207	
0	Q 13	50.03.0523	ZTX651		ZTX 651	0	R 48	57.11.3220	22R	MF, 1%, 0207	
0	Q 14	50.03.0523	ZTX651		ZTX 651	0	R 49	57.11.3220	22R	MF, 1%, 0207	
0	Q 15	50.03.0523	ZTX651		ZTX 651	0	R 50	57.11.3220	22R	MF, 1%, 0207	
0	Q 16	50.03.0523	ZTX651		ZTX 651	0	R 51	57.11.3220	22R	MF, 1%, 0207	
0	Q 17	50.03.0523	ZTX651		ZTX 651	0	R 52	57.11.3220	22R	MF, 1%, 0207	
0	Q 18	50.03.0523	ZTX651		ZTX 651	0	R 53	57.11.3220	22R	MF, 1%, 0207	
0	Q 19	50.03.0523	ZTX651		ZTX 651	0	R 54	57.11.3332	3k3	MF, 1%, 0207	
0	Q 20	50.03.0352	ZTX751S		ZTX 751 S	0	R 55	57.11.3332	3k3	MF, 1%, 0207	
0	Q 21	50.03.0352	ZTX751S		ZTX 751 S	0	R 56	57.11.3221	220R	MF, 1%, 0207	
0	Q 22	50.03.0352	ZTX751S		ZTX 751 S	0	R 57	57.11.3101	100R	MF, 1%, 0207	
0	Q 23	50.03.0352	ZTX751S		ZTX 751 S	0	R 58	57.11.3101	100R	MF, 1%, 0207	
0	Q 24	50.03.0352	ZTX751S		ZTX 751 S	0	R 59	57.11.3101	100R	MF, 1%, 0207	
0	Q 25	50.03.0352	ZTX751S		ZTX 751 S	0	R 60	57.11.3101	100R	MF, 1%, 0207	
0	Q 26	50.03.0352	ZTX751S		ZTX 751 S	0	R 61	57.11.3100	10R	MF, 1%, 0207	
0	Q 27	50.03.0352	ZTX751S		ZTX 751 S	0	R 62	57.11.3332	3k3	MF, 1%, 0207	
0	Q 28	50.03.0352	ZTX751S		ZTX 751 S	0	R 63	57.11.3271	270R	MF, 1%, 0207	
0	Q 29	50.03.0352	ZTX751S		ZTX 751 S	0	R 64	57.11.3271	270R	MF, 1%, 0207	
0	Q 30	50.03.0352	ZTX751S		ZTX 751 S	0	R 65	57.11.3271	270R	MF, 1%, 0207	
0	Q 31	50.03.0352	ZTX751S		ZTX 751 S	0	R 66	57.11.3271	270R	MF, 1%, 0207	
0	Q 32	50.03.0352	ZTX751S		ZTX 751 S	0	R 67	57.11.3101	100R	MF, 1%, 0207	
0	Q 33	50.03.0352	ZTX751S		ZTX 751 S	0	R 68	57.11.3103	10k	MF, 1%, 0207	
0	Q 34	50.03.0352	ZTX751S		ZTX 751 S	0	R 69	57.11.3113	11k	MF, 1%, 0207	
0	Q 35	50.03.0352	ZTX751S		ZTX 751 S	0	R 70	57.11.3102	1k0	MF, 1%, 0207	
0	Q 36	50.03.0352	ZTX751S		ZTX 751 S	0	R 71	57.11.3103	10k	MF, 1%, 0207	
0	Q 37	50.03.0352	ZTX751S		ZTX 751 S	0	R 72	57.11.3000	0R0	MF, 0207	
0	Q 38	50.03.0352	ZTX751S		ZTX 751 S						
0	Q 39	50.03.0352	ZTX751S		ZTX 751 S	0	RZ 1	57.88.4473	8*47k	2%, SIP 9	
0	Q 40	50.03.0352	ZTX751S		ZTX 751 S	0	RZ 2	57.88.4473	8*47k	2%, SIP 9	
0	Q 41	50.03.0352	ZTX751S		ZTX 751 S	0	RZ 3	57.88.4473	8*47k	2%, SIP 9	
0	Q 42	50.03.0352	ZTX751S		ZTX 751 S	0	RZ 4	57.88.4473	8*47k	2%, SIP 9	
0	Q 43	50.03.0352	ZTX751S		ZTX 751 S	0	RZ 5	57.88.4473	8*47k	2%, SIP 9	
0	Q 44	50.03.0352	ZTX751S		ZTX 751 S	0	RZ 6	57.88.2221	4*220R	2%, SIP 8	
0	Q 45	50.03.0352	ZTX751S		ZTX 751 S	0	RZ 7	57.88.2221	4*220R	2%, SIP 8	
0	Q 46	50.03.0352	ZTX751S		ZTX 751 S	0	RZ 8	57.88.2221	4*220R	2%, SIP 8	
0	Q 47	50.03.0352	ZTX751S		ZTX 751 S	0	RZ 9	57.88.2221	4*220R	2%, SIP 8	
0	Q 48	50.03.0352	ZTX751S		ZTX 751 S	0	RZ 10	57.88.4473	8*47k	2%, SIP 9	
0	Q 49	50.03.0352	ZTX751S		ZTX 751 S	0	RZ 11	57.88.2221	4*220R	2%, SIP 8	
0	Q 50	50.03.0352	ZTX751S		ZTX 751 S	0	RZ 12	57.88.2221	4*220R	2%, SIP 8	
0	Q 51	50.03.0352	ZTX751S		ZTX 751 S	0	RZ 13	57.88.2221	4*220R	2%, SIP 8	
						0	RZ 14	57.88.2221	4*220R	2%, SIP 8	
0	R 1	57.11.3000	0R0		MF, 0207	0	RZ 15	57.88.2221	4*220R	2%, SIP 8	
0	R 2	57.11.3332	3k3		MF, 1%, 0207	0	RZ 16	57.88.2221	4*220R	2%, SIP 8	
0	R 3	57.11.3102	1k0		MF, 1%, 0207	0	RZ 17	57.88.2221	4*220R	2%, SIP 8	
0	R 4	57.11.3472	4k7		MF, 1%, 0207	0	RZ 18	57.88.2221	4*220R	2%, SIP 8	
0	R 5	57.11.3332	3k3		MF, 1%, 0207						
0	R 6	57.11.3473	47k		MF, 1%, 0207	0	S 1	55.03.0122	1*a	S 1 TASTE, 1*A, PRINT,IMPULS	
0	R 7	57.11.3103	10k		MF, 1%, 0207	0	S 2	55.01.0168	8*a	SZ , 8*A, DIL	
0	R 8	57.11.3473	47k		MF, 1%, 0207						
0	R 9	57.92.7013	0.5A		POLY- PTC, 60V	0	XIC 2	53.03.0184	32p	DIL 0.6", lot, gerade	
0	R 10	57.11.3100	10R		MF, 1%, 0207	0	XIC 3	53.03.0184	32p	DIL 0.6", lot, gerade	
0	R 11	57.11.3101	100R		MF, 1%, 0207	0	XIC 4	53.03.0184	32p	DIL 0.6", lot, gerade	
0	R 12	57.11.3684	680k		MF, 1%, 0207	0	XIC 5	53.03.0184	32p	DIL 0.6", lot, gerade	
0	R 13	57.11.3103	10k		MF, 1%, 0207	0	XIC 8	53.03.0165	20p	DIL 0.3", lot, gerade	
0	R 14	57.11.3103	10k		MF, 1%, 0207	0	XIC 9	53.03.0168	16p	DIL 0.3", lot, gerade	
0	R 15	57.11.3220	22R		MF, 1%, 0207	0	XIC 18	53.03.0218	1p	single-in-line	
0	R 16	57.11.3332	3k3		MF, 1%, 0207	0	XIC 23	53.03.0218	1p	single-in-line	
0	R 17	57.92.7058	4.0A		POLY- PTC, 30V	0	XIC 24	53.03.0173	28p	DIL 0.6", lot, gerade	
0	R 18	57.11.3103	10k		MF, 1%, 0207	0	XIC 25	53.03.0182	24p	DIL 0.3", lot, gerade	
0	R 19	57.11.3473	47k		MF, 1%, 0207						
0	R 20	57.92.7013	0.5A		POLY- PTC, 60V	0	Y 1	89.01.1009	16.000MHz	16.000 000 MHz, HC 49/U	
0	R 21	57.11.3473	47k		MF, 1%, 0207						
0	R 22	57.11.3100	10R		MF, 1%, 0207						
0	R 23	57.11.3332	3k3		MF, 1%, 0207						
0	R 24	57.11.3332	3k3		MF, 1%, 0207						
0	R 25	57.11.3220	22R		MF, 1%, 0207						
0	R 26	57.11.3220	22R		MF, 1%, 0207						
0	R 27	57.11.3220	22R		MF, 1%, 0207						
0	R 28	57.11.3220	22R		MF, 1%, 0207						
0	R 29	57.11.3220	22R		MF, 1%, 0207						
0	R 30	57.11.3220	22R		MF, 1%, 0207						
0	R 31	57.11.3220	22R		MF, 1%, 0207						
0	R 32	57.11.3220	22R		MF, 1%, 0207						
0	R 33	57.11.3220	22R		MF, 1%, 0207						
0	R 34	57.11.3220	22R		MF, 1%, 0207						
0	R 35	57.11.3101	100R		MF, 1%, 0207						
0	R 36	57.11.3101	100R		MF, 1%, 0207						
0	R 37	57.11.3101	100R		MF, 1%, 0207						

End of List

## Comments

IC13:  
BEFORE INSERT, CUT PIN 2.  
CONNECT PIN 1 AND PIN 2 ON SOLDERING SIDE.



## Channel Controller Board I.940.764.2I

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.22.5221	220u	EL	25V, 20%, RM5	0	IC 4	50.14.1010	TC551001-85	SRAM 128K * 8, 85ns	
0	C 2	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 5	50.14.2009	27C1001	EPROM 128K * 8	
0	C 3	59.06.0104	100n	PETP, 63V, 10%, RM5						SW HDLC EPROM 1.941.760.xx	
0	C 4	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 6	50.17.1139	74HC139	IC ... 74 HC 139 .., ,A	
0	C 5	59.06.5222	2n2	PETP, 63V, 5%, RM5		0	IC 7	50.17.1138	74HC138	IC ... 74 HC 138 .., ,A	
0	C 6	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 8	50.18.0100	PLD16V8	16 V 8 D - 25 LP	
0	C 7	59.22.5221	220u	EL	25V, 20%, RM5					DIP20, SW753 HDLC-GAL (1.940.915.20)	
0	C 8	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 9	50.15.0104	MC3486	IC MC 3486 P, DS 3486 N,	
0	C 9	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 10	50.17.1002	74HC02	IC ... 74 HC 02 .., ,A	
0	C 10	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 11	50.17.1032	74HC32	IC ... 74 HC 32 .., ,A	
0	C 11	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 12	50.09.0101	TL072	IC TL 072 CN .., ,A	
0	C 12	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 13	50.17.1014	74HC14	IC ... 74 HC 14 .., ,A	
0	C 13	59.06.0104	100n	PETP, 63V, 10%, RM5						SEE COMMENT	
0	C 14	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 14	50.17.1123	74HC123	IC ... 74 HC 123 .., ,A	
0	C 15	59.22.6470	47u	EL	40V, 20%, RM5	0	IC 15	50.63.0100	MC68302	IC MC 68 302 FC 16 C .., ,A	
0	C 16	59.06.5473	47n	PETP, 63V, 5%, RM5		0	IC 16	50.17.1014	74HC14	IC ... 74 HC 14 .., ,A	
0	C 17	59.06.5223	22n	PETP, 63V, 5%, RM5		0	IC 17	50.17.1148	74HC148	IC ... 74 HC 148 .., ,A	
0	C 18	59.34.2270	27p	CER 63V, 5%, N150		0	IC 18	50.16.0111	8279	IC IP 8279-5, ID 8279-5,	
0	C 19	59.34.2270	27p	CER 63V, 5%, N150		0	IC 19	50.17.1244	74HC244	IC ... 74 HC 244 .., ,A	
0	C 20	59.22.6470	47u	EL	40V, 20%, RM5	0	IC 20	50.17.1574	74HC574	IC ... 74 HC 574 .., ,A	
0	C 21	59.22.3471	470u	EL	10V, 20%, RM5	0	IC 21	50.17.1574	74HC574	IC ... 74 HC 574 .., ,A	
0	C 22	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 22	50.17.1574	74HC574	IC ... 74 HC 574 .., ,A	
0	C 23	59.06.5222	2n2	PETP, 63V, 5%, RM5		0	IC 23	50.16.0111	8279	IC IP 8279-5, ID 8279-5,	
0	C 24	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 24	50.19.0204	ADS7832		
0	C 25	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 25	50.19.0113	MAX526D	D/A Converter 12 Bit	
0	C 26	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 26	50.17.1032	74HC32	IC ... 74 HC 32 .., ,A	
0	C 27	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 27	50.17.1138	74HC138	IC ... 74 HC 138 .., ,A	
0	C 28	59.22.3471	470u	EL	10V, 20%, RM5	0	IC 28	50.17.1163	74HC163	IC ... 74 HC 163 .., ,A	
0	C 29	59.22.3471	470u	EL	10V, 20%, RM5	0	IC 29	50.17.1074	74HC74	IC ... 74 HC 74 .., ,A	
0	C 30	59.22.6100	10u	EL	35V, 20%, RM5	0	IC 30	50.17.1138	74HC138	IC ... 74 HC 138 .., ,A	
0	C 31	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 31	50.17.1138	74HC138	IC ... 74 HC 138 .., ,A	
0	C 32	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 32	50.17.1139	74HC139	IC ... 74 HC 139 .., ,A	
0	C 33	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 33	50.17.1139	74HC139	IC ... 74 HC 139 .., ,A	
0	C 34	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 34	50.17.1138	74HC138	IC ... 74 HC 138 .., ,A	
0	C 35	59.22.6100	10u	EL	35V, 20%, RM5	0	IC 35	50.10.0109	LM337L	IC LM 337 LZ,	
0	C 36	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 36	50.17.1154	74HC154	4-to16 Line driver, DIP 24-300	
0	C 37	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 37	50.17.1154	74HC154	4-to16 Line driver, DIP 24-300	
0	C 38	59.06.5104	100n	PETP, 63V, 5%, RM5		0	IC 38	50.17.1244	74HC244	IC ... 74 HC 244 .., ,A	
0	C 39	59.22.6470	47u	EL	40V, 20%, RM5	0	IC 39	50.11.0157	TL7705B	IC TL 7705 BCP,	
0	C 40	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 40	50.09.0101	TL072	IC TL 072 CN .., ,A	
0	C 41	59.06.0104	100n	PETP, 63V, 10%, RM5		0	IC 41	50.10.0106	TL431	IC TL 431 CLP,	
0	C 42	59.06.5105	1u0	PETP, 50V, 5%, RM5							
0	C 43	59.22.8109	1u	EL	50V, 20%, RM5	0	J 1	54.25.0005	5p	Buchse, 16A, vertikal, PCB	
0	C 44	59.22.8109	1u	EL	50V, 20%, RM5	0	J 2	54.11.2010	64p	EU-Q 2*32p	
0	C 45	59.06.5104	100n	PETP, 63V, 5%, RM5							
0	C 46	59.34.4101	100p	CER 63V, 5%, N750		0	JSJ 1	54.01.0021	Jumper	0.63 * 0.63mm	
0	C 47	59.06.0104	100n	PETP, 63V, 10%, RM5		0	JSJ 2	54.01.0021	Jumper	0.63 * 0.63mm	
0	D 2	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	JSJ 3	54.01.0021	Jumper	0.63 * 0.63mm	
0	D 3	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	JSJ 6	54.01.0021	Jumper	0.63 * 0.63mm	
0	D 4	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 5	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	L 1	62.03.0010	48uH	2A Toroid Chocke	
0	D 6	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 7	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 1	1.940.753.11	1 mp	CHANNEL CONTROLLER PCB //I	
0	D 8	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 2	1.940.753.04	1 mp	NR.-ETIKETTE 5 * 20	
0	D 9	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 3	1.101.001.20	1 mp	Label	
0	D 10	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 4	43.01.0108	1 mp	Label	
0	D 11	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 5	1.010.015.50	1 mp	Spacer	
0	D 12	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	MP 6	28.99.0119	2 mp		
0	D 13	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	D 14	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 2	54.01.0020	1p	Pin 0.63*0.63	
0	D 15	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 3	54.01.0020	1p	Pin 0.63*0.63	
0	D 16	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 4	54.01.0020	1p	Pin 0.63*0.63	
0	D 17	50.04.0127	BAT85	200mA, Schottky		0	P 5	54.01.0020	1p	Pin 0.63*0.63	
0	D 18	50.04.0127	BAT85	200mA, Schottky		0	P 6	54.01.0020	1p	Pin 0.63*0.63	
0	D 19	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 7	54.01.0020	1p	Pin 0.63*0.63	
0	D 20	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 8	54.01.0020	1p	Pin 0.63*0.63	
0	D 21	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 9	54.01.0020	1p	Pin 0.63*0.63	
0	D 22	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 10	54.01.0020	1p	Pin 0.63*0.63	
0	D 23	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 11	54.02.0320	1p	Flatpin, 2.8*0.8mm	
0	D 24	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 12	54.01.0020	1p	Pin 0.63*0.63	
0	D 25	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 13	54.01.0020	1p	Pin 0.63*0.63	
0	D 26	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	P 14	54.01.0020	1p	Pin 0.63*0.63	
0	D 27	50.04.0127	BAT85	200mA, Schottky		0	P 15	54.01.0020	1p	Pin 0.63*0.63	
						0	P 16	54.01.0020	1p	Pin 0.63*0.63	
0	DL 1	50.04.2129	LS3360	DL LS 3360, , RT DIFF		0	P 17	54.01.0020	1p	Pin 0.63*0.63	
0	DL 2	50.04.2129	LS3360	DL LS 3360, , RT DIFF		0	P 18	54.01.0020	1p	Pin 0.63*0.63	
0	DL 3	50.04.2129	LS3360	DL LS 3360, , RT DIFF		0	P 19	54.01.0020	1p	Pin 0.63*0.63	
0	DL 4	50.04.2129	LS3360	DL LS 3360, , RT DIFF		0	P 20	54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE	
0	DL 5	50.04.2131	LG3360	DL LG 3360, , GN DIFF		0	P 21	54.14.2103	20p	P STECKER 20 P,AU,VR,GERADE	
0	DL 6	50.04.2130	LY3360	DL LY 3360, , GB DIFF		0	P 22	54.14.2001	10p	1/20" Au, gerade, ohne Verrieg	
						0	P 23	54.16.0540	40p	P 1/40", 40 P, AU, PRINT	
0	DV 1	50.04.1511	6V2	Zener, 5%, 1.3W, DO-41		0	P 24	54.16.0534	34p	P 1/40", 34 P, AU, PRINT	
						0	P 25	54.16.0540	40p	P 1/40", 40 P, AU, PRINT	
0	IC 1	50.17.1086	74HC86	IC ... 74 HC 86 .., ,A		0	P 26	54.14.2102	16p	P STECKER 16 P,AU,VR,GERADE	
0	IC 2	50.14.2009	27C1001	EPROM 128K * 8							
				SW HDLC EPROM 1.941.760.xx		0	Q 1	50.03.1554	VP0808M	VP 0808 M	
0	IC 3	50.14.1010	TC551001-85	SRAM 128K * 8, 85ns		0	Q 2	50.03.1505	VN0808M	VN 0808 M, ZVN 0108 A	

## Channel Controller Board I.940.764.2I

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	Q 3	50.43.0340			Q BC 337-25,	0	R 38	57.11.3101	100R	MF, 1%, 0207	
0	Q 4	50.03.0523		ZTX651	ZTX 651	0	R 39	57.11.3331	330R	MF, 1%, 0207	
0	Q 5	50.03.0523		ZTX651	ZTX 651	0	R 40	57.11.3331	330R	MF, 1%, 0207	
0	Q 6	50.03.0523		ZTX651	ZTX 651	0	R 41	57.11.3101	100R	MF, 1%, 0207	
0	Q 7	50.03.0523		ZTX651	ZTX 651	0	R 42	57.11.3101	100R	MF, 1%, 0207	
0	Q 8	50.03.0523		ZTX651	ZTX 651	0	R 43	57.11.3101	100R	MF, 1%, 0207	
0	Q 9	50.03.0523		ZTX651	ZTX 651	0	R 44	57.11.3101	100R	MF, 1%, 0207	
0	Q 10	50.03.0523		ZTX651	ZTX 651	0	R 45	57.11.3271	270R	MF, 1%, 0207	
0	Q 11	50.03.0523		ZTX651	ZTX 651	0	R 46	57.11.3821	820R	MF, 1%, 0207	
0	Q 12	50.03.0523		ZTX651	ZTX 651	0	R 47	57.11.3473	47k	MF, 1%, 0207	
0	Q 13	50.03.0523		ZTX651	ZTX 651	0	R 48	57.11.3220	22R	MF, 1%, 0207	
0	Q 14	50.03.0523		ZTX651	ZTX 651	0	R 49	57.11.3220	22R	MF, 1%, 0207	
0	Q 15	50.03.0523		ZTX651	ZTX 651	0	R 50	57.11.3220	22R	MF, 1%, 0207	
0	Q 16	50.03.0523		ZTX651	ZTX 651	0	R 51	57.11.3220	22R	MF, 1%, 0207	
0	Q 17	50.03.0523		ZTX651	ZTX 651	0	R 52	57.11.3220	22R	MF, 1%, 0207	
0	Q 18	50.03.0523		ZTX651	ZTX 651	0	R 53	57.11.3220	22R	MF, 1%, 0207	
0	Q 19	50.03.0523		ZTX651	ZTX 651	0	R 54	57.11.3332	3k3	MF, 1%, 0207	
0	Q 20	50.03.0352		ZTX751S	ZTX 751 S	0	R 55	57.11.3332	3k3	MF, 1%, 0207	
0	Q 21	50.03.0352		ZTX751S	ZTX 751 S	0	R 56	57.11.3221	220R	MF, 1%, 0207	
0	Q 22	50.03.0352		ZTX751S	ZTX 751 S	0	R 57	57.11.3101	100R	MF, 1%, 0207	
0	Q 23	50.03.0352		ZTX751S	ZTX 751 S	0	R 58	57.11.3101	100R	MF, 1%, 0207	
0	Q 24	50.03.0352		ZTX751S	ZTX 751 S	0	R 59	57.11.3101	100R	MF, 1%, 0207	
0	Q 25	50.03.0352		ZTX751S	ZTX 751 S	0	R 60	57.11.3101	100R	MF, 1%, 0207	
0	Q 26	50.03.0352		ZTX751S	ZTX 751 S	0	R 61	57.11.3100	10R	MF, 1%, 0207	
0	Q 27	50.03.0352		ZTX751S	ZTX 751 S	0	R 62	57.11.3332	3k3	MF, 1%, 0207	
0	Q 28	50.03.0352		ZTX751S	ZTX 751 S	0	R 63	57.11.3271	270R	MF, 1%, 0207	
0	Q 29	50.03.0352		ZTX751S	ZTX 751 S	0	R 64	57.11.3271	270R	MF, 1%, 0207	
0	Q 30	50.03.0352		ZTX751S	ZTX 751 S	0	R 65	57.11.3271	270R	MF, 1%, 0207	
0	Q 31	50.03.0352		ZTX751S	ZTX 751 S	0	R 66	57.11.3271	270R	MF, 1%, 0207	
0	Q 32	50.03.0352		ZTX751S	ZTX 751 S	0	R 67	57.11.3101	100R	MF, 1%, 0207	
0	Q 33	50.03.0352		ZTX751S	ZTX 751 S	0	R 68	57.11.3103	10k	MF, 1%, 0207	
0	Q 34	50.03.0352		ZTX751S	ZTX 751 S	0	R 69	57.11.3113	11k	MF, 1%, 0207	
0	Q 35	50.03.0352		ZTX751S	ZTX 751 S	0	R 70	57.11.3102	1k0	MF, 1%, 0207	
0	Q 36	50.03.0352		ZTX751S	ZTX 751 S	0	R 71	57.11.3103	10k	MF, 1%, 0207	
0	Q 37	50.03.0352		ZTX751S	ZTX 751 S	0	R 72	57.11.3000	0R0	MF, 0207	
0	Q 38	50.03.0352		ZTX751S	ZTX 751 S						
0	Q 39	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 1	57.88.4473	8*47k	2%, SIP 9	
0	Q 40	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 2	57.88.4473	8*47k	2%, SIP 9	
0	Q 41	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 3	57.88.4473	8*47k	2%, SIP 9	
0	Q 42	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 4	57.88.4473	8*47k	2%, SIP 9	
0	Q 43	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 5	57.88.4473	8*47k	2%, SIP 9	
0	Q 44	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 6	57.88.2221	4*220R	2%, SIP 8	
0	Q 45	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 7	57.88.2221	4*220R	2%, SIP 8	
0	Q 46	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 8	57.88.2221	4*220R	2%, SIP 8	
0	Q 47	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 9	57.88.2221	4*220R	2%, SIP 8	
0	Q 48	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 10	57.88.4473	8*47k	2%, SIP 9	
0	Q 49	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 11	57.88.2221	4*220R	2%, SIP 8	
0	Q 50	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 12	57.88.2221	4*220R	2%, SIP 8	
0	Q 51	50.03.0352		ZTX751S	ZTX 751 S	0	RZ 13	57.88.2221	4*220R	2%, SIP 8	
						0	RZ 14	57.88.2221	4*220R	2%, SIP 8	
0	R 1	57.11.3000		0R0	MF, 0207	0	RZ 15	57.88.2221	4*220R	2%, SIP 8	
0	R 2	57.11.3332		3k3	MF, 1%, 0207	0	RZ 16	57.88.2221	4*220R	2%, SIP 8	
0	R 3	57.11.3102		1k0	MF, 1%, 0207	0	RZ 17	57.88.2221	4*220R	2%, SIP 8	
0	R 4	57.11.3472		4k7	MF, 1%, 0207	0	RZ 18	57.88.2221	4*220R	2%, SIP 8	
0	R 5	57.11.3332		3k3	MF, 1%, 0207						
0	R 6	57.11.3473		47k	MF, 1%, 0207	0	S 1	55.03.0122	1*a	S 1 TASTE, 1*A, PRINT,IMPULS	
0	R 7	57.11.3103		10k	MF, 1%, 0207	0	S 2	55.01.0168	8*a	SZ , 8*A, DIL	
0	R 8	57.11.3473		47k	MF, 1%, 0207						
0	R 9	57.92.7013		0.5A	POLY- PTC, 60V	0	XIC 2	53.03.0184	32p	DIL 0.6", lot, gerade	
0	R 10	57.11.3100		10R	MF, 1%, 0207	0	XIC 3	53.03.0184	32p	DIL 0.6", lot, gerade	
0	R 11	57.11.3101		100R	MF, 1%, 0207	0	XIC 4	53.03.0184	32p	DIL 0.6", lot, gerade	
0	R 12	57.11.3684		680k	MF, 1%, 0207	0	XIC 5	53.03.0184	32p	DIL 0.6", lot, gerade	
0	R 13	57.11.3103		10k	MF, 1%, 0207	0	XIC 8	53.03.0165	20p	DIL 0.3", lot, gerade	
0	R 14	57.11.3103		10k	MF, 1%, 0207	0	XIC 9	53.03.0168	16p	DIL 0.3", lot, gerade	
0	R 15	57.11.3220		22R	MF, 1%, 0207	0	XIC 18	53.03.0218	1p	single-in-line	
0	R 16	57.11.3332		3k3	MF, 1%, 0207	0	XIC 23	53.03.0218	1p	single-in-line	
0	R 17	57.92.7058		4.0A	POLY- PTC, 30V	0	XIC 24	53.03.0173	28p	DIL 0.6", lot, gerade	
0	R 18	57.11.3103		10k	MF, 1%, 0207	0	XIC 25	53.03.0182	24p	DIL 0.3", lot, gerade	
0	R 19	57.11.3473		47k	MF, 1%, 0207						
0	R 20	57.92.7013		0.5A	POLY- PTC, 60V	0	Y 1	89.01.1009	16.000MHz	16.000 000 MHz, HC 49/U	
0	R 21	57.11.3473		47k	MF, 1%, 0207						
0	R 22	57.11.3100		10R	MF, 1%, 0207						
0	R 23	57.11.3332		3k3	MF, 1%, 0207						
0	R 24	57.11.3332		3k3	MF, 1%, 0207						
0	R 25	57.11.3220		22R	MF, 1%, 0207						
0	R 26	57.11.3220		22R	MF, 1%, 0207						
0	R 27	57.11.3220		22R	MF, 1%, 0207						
0	R 28	57.11.3220		22R	MF, 1%, 0207						
0	R 29	57.11.3220		22R	MF, 1%, 0207						
0	R 30	57.11.3220		22R	MF, 1%, 0207						
0	R 31	57.11.3220		22R	MF, 1%, 0207						
0	R 32	57.11.3220		22R	MF, 1%, 0207						
0	R 33	57.11.3220		22R	MF, 1%, 0207						
0	R 34	57.11.3220		22R	MF, 1%, 0207						
0	R 35	57.11.3101		100R	MF, 1%, 0207						
0	R 36	57.11.3101		100R	MF, 1%, 0207						
0	R 37	57.11.3101		100R	MF, 1%, 0207						

End of List

## Comments

IC13:  
BEFORE INSERT, CUT PIN 2.  
CONNECT PIN 1 AND PIN 2 ON SOLDERING SIDE.

**SCHEMATA / CIRCUIT DIAGRAMS**

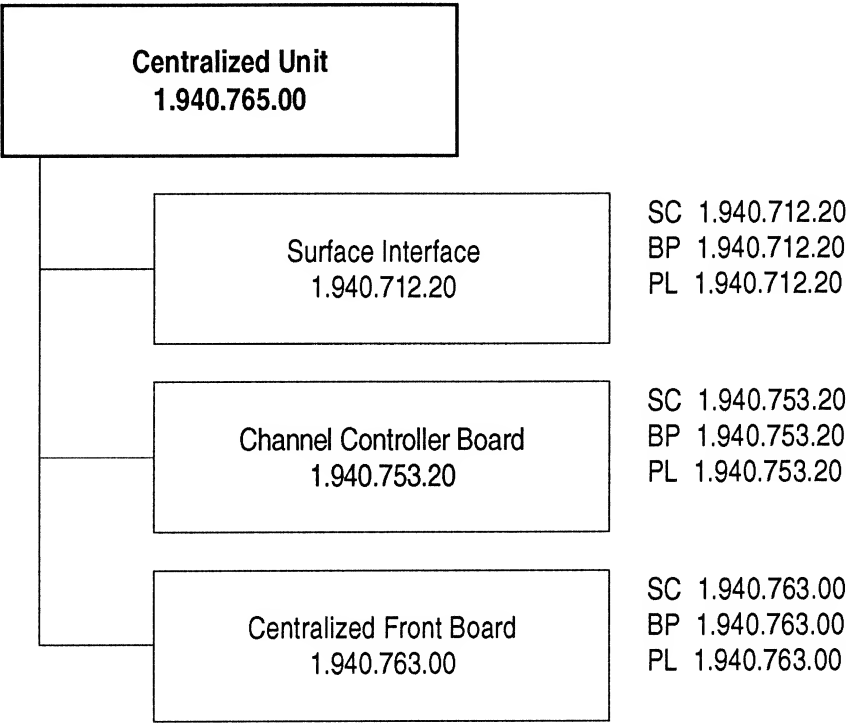
**Centralized Unit**

Centralized Unit .....	1.940.765.00
Surface Interface .....	1.940.712.20
Channel Controller Board .....	1.940.753.20
Centralized Front Board .....	1.940.763.00



**Centralized Unit**

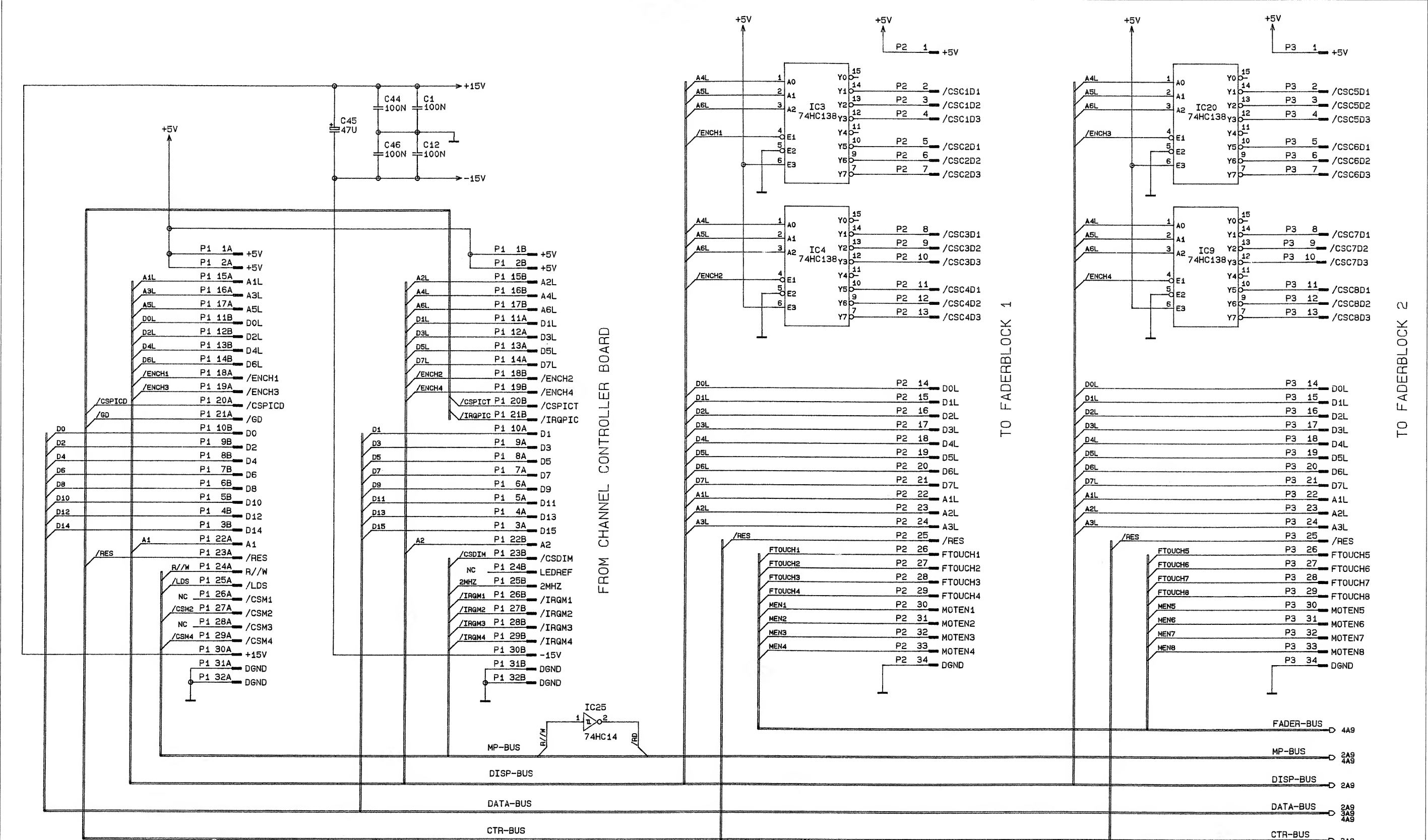
**1.940.765.00**

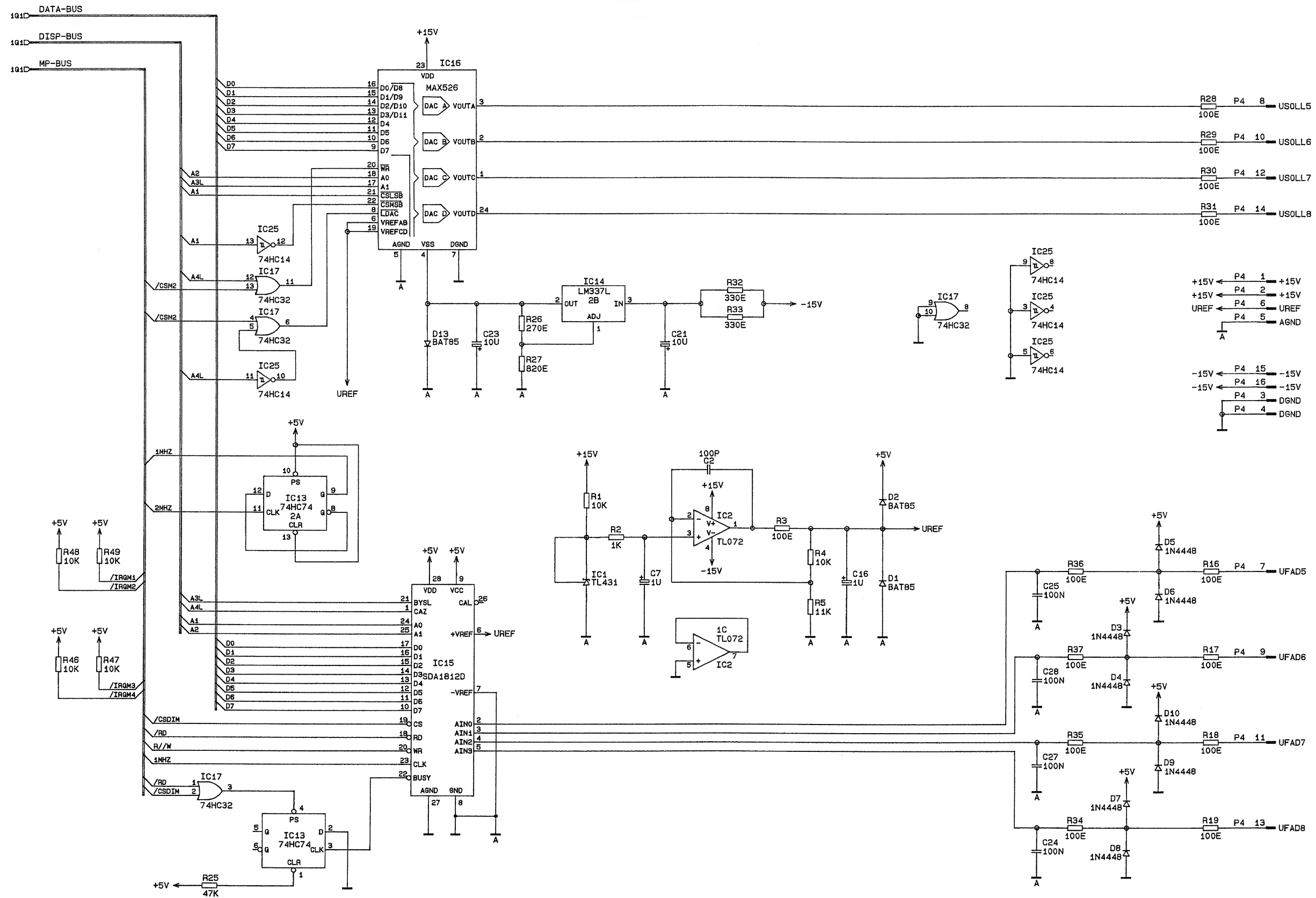


SC: Schema      Circuit Diagram  
BP: Bestückungsplan    PCB Layout  
PL: Positionsliste      Positional List



Surface Interface 1.940.712.21

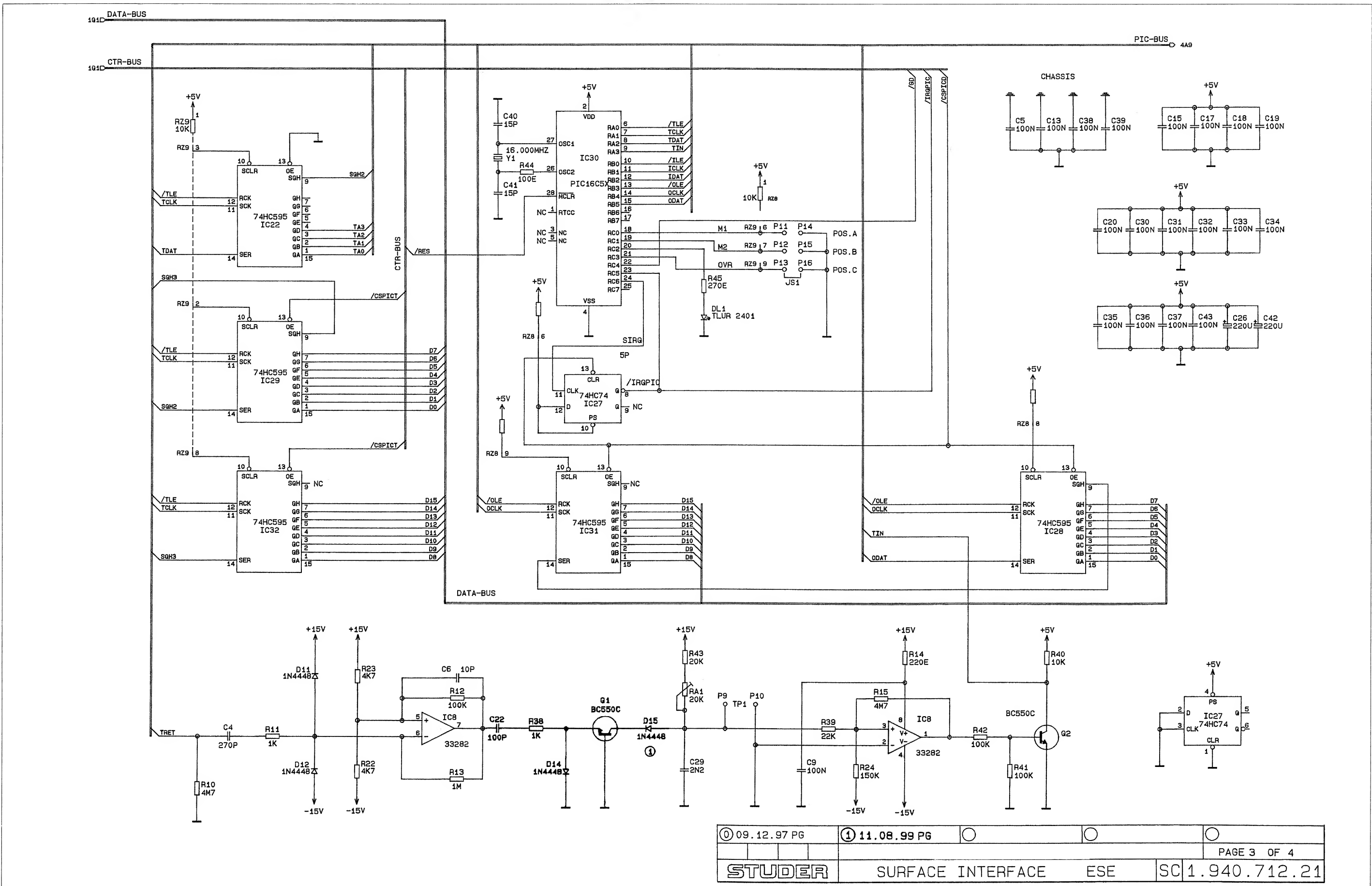


**Surface Interface** 1.940.712.21

TO FADER FRONT BOARD 2

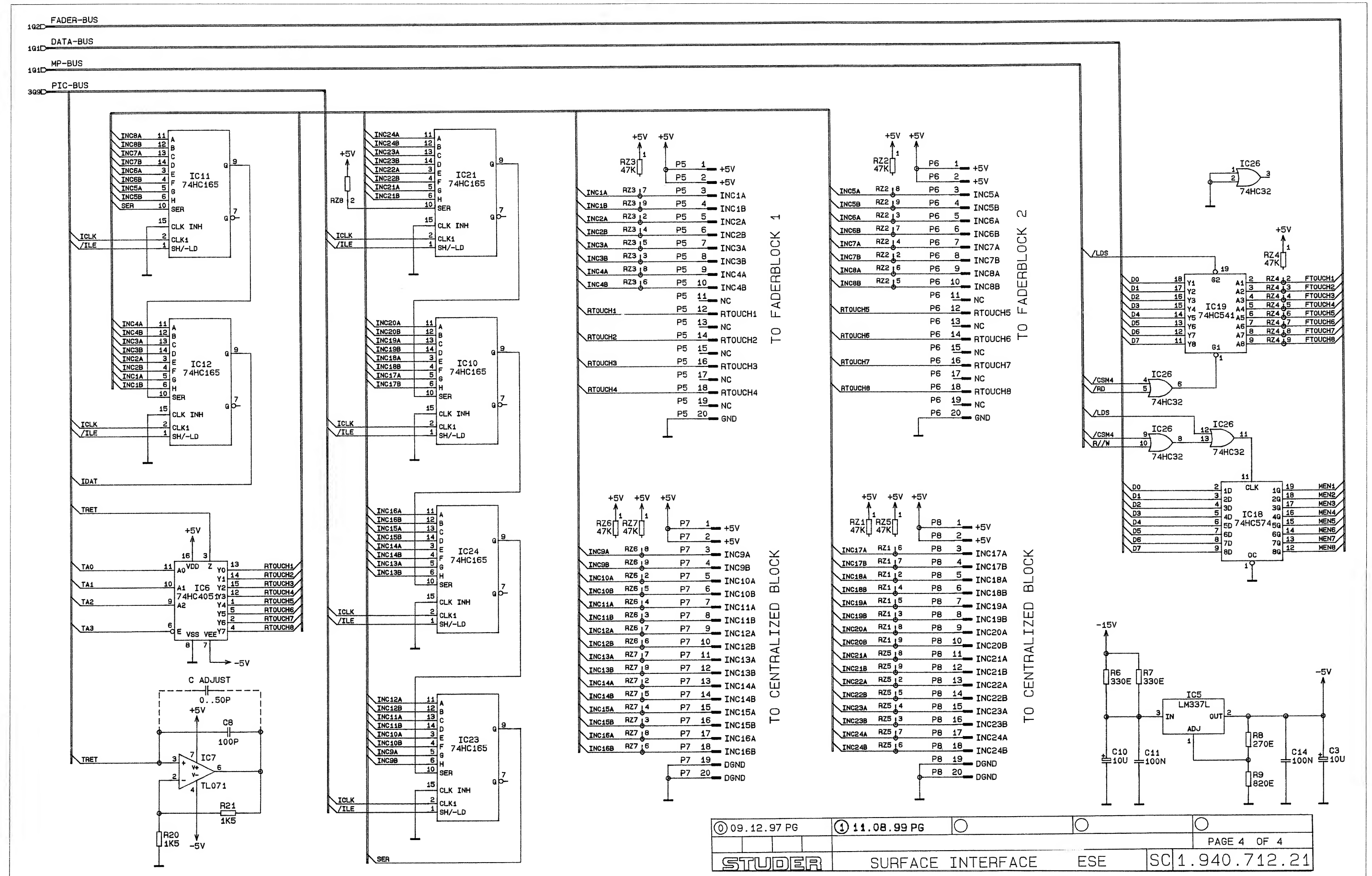


Surface Interface 1.940.712.21

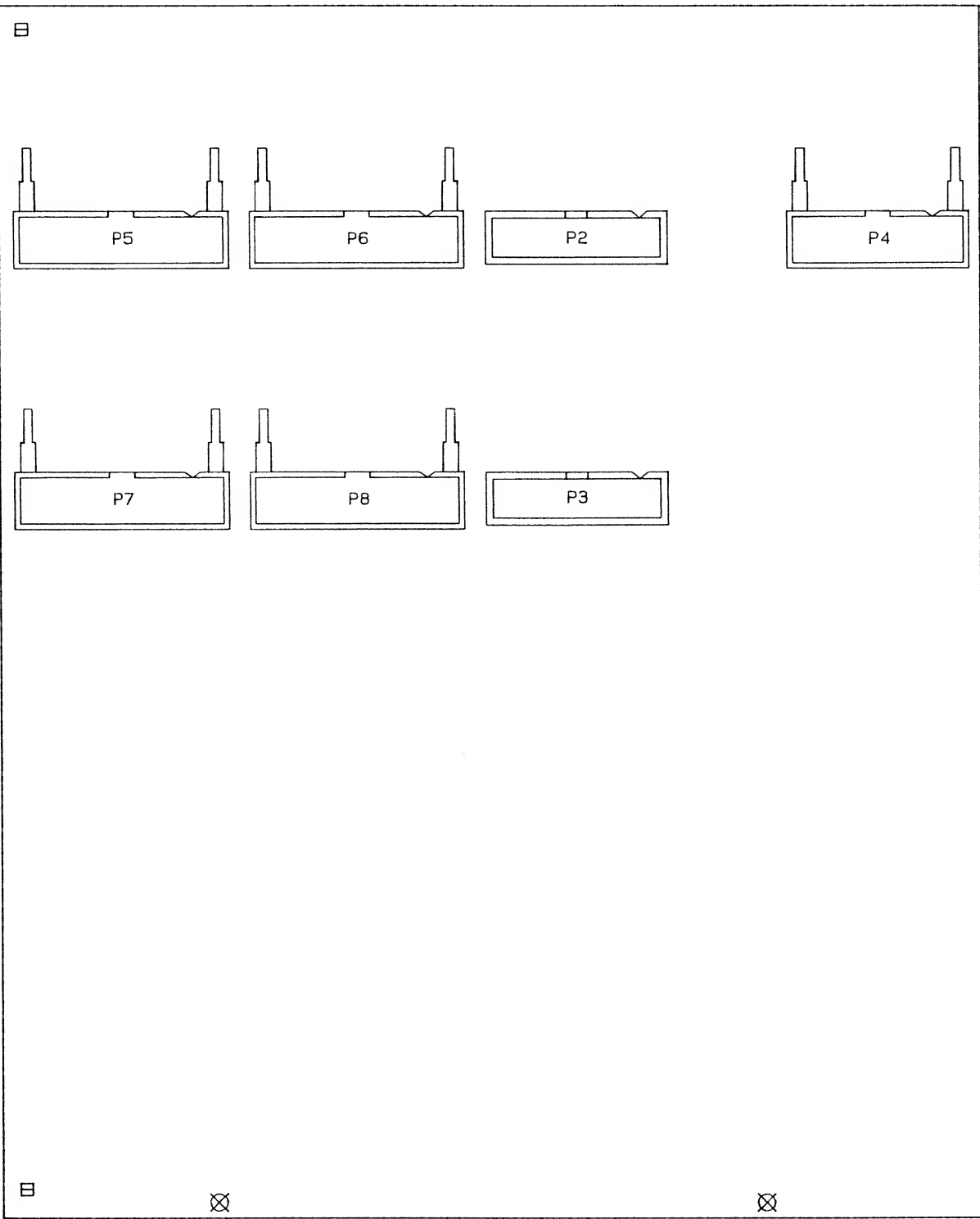
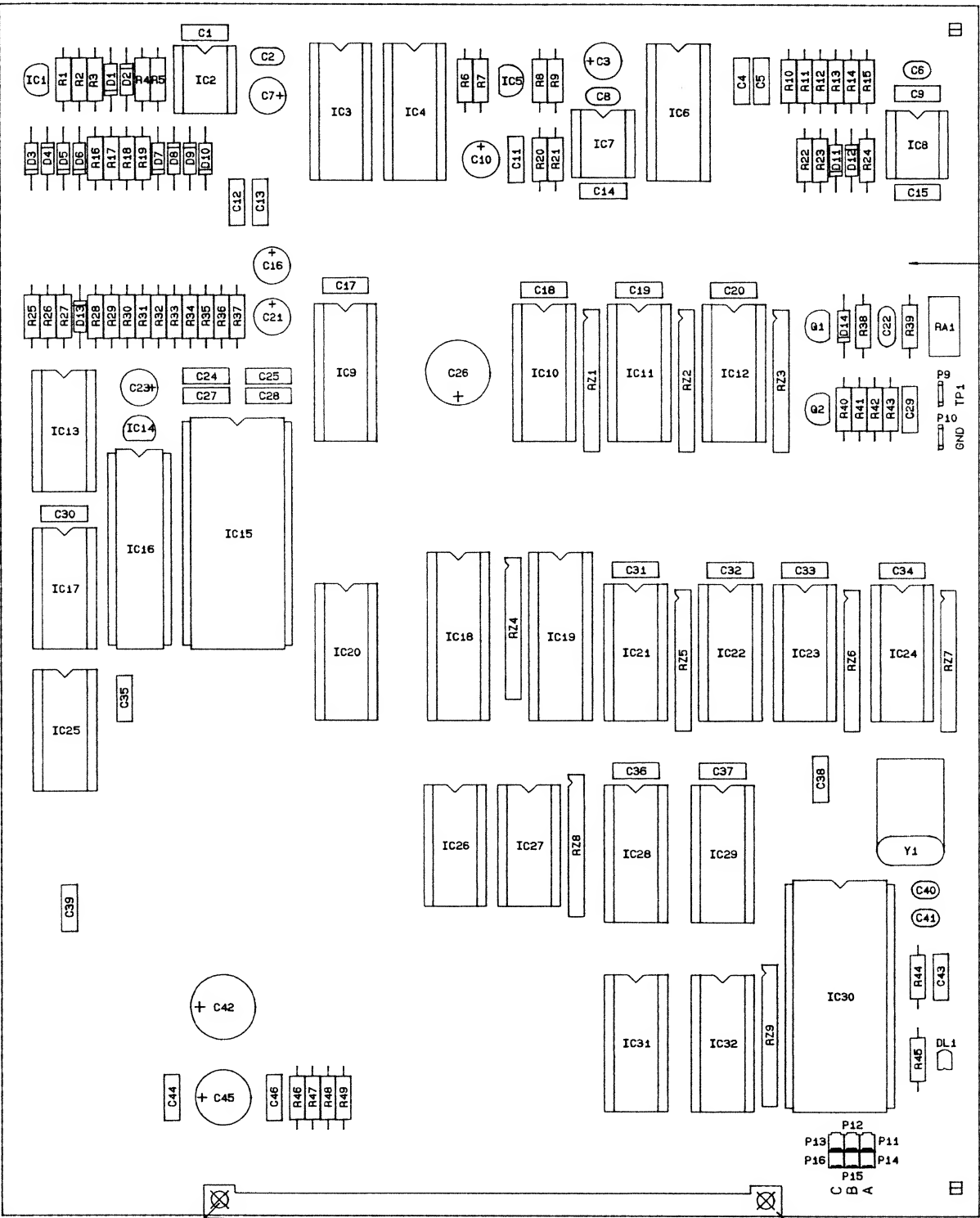




**Surface Interface** 1.940.712.21



Surface Interface 1.940.712.21



○				
①				
②	11.08.98	P6	/H	/H
③	09.12.97	P6	/H	/H
IND	DATUM	GEZ.	GEPR.	GES
BLATT 1 VON 1				



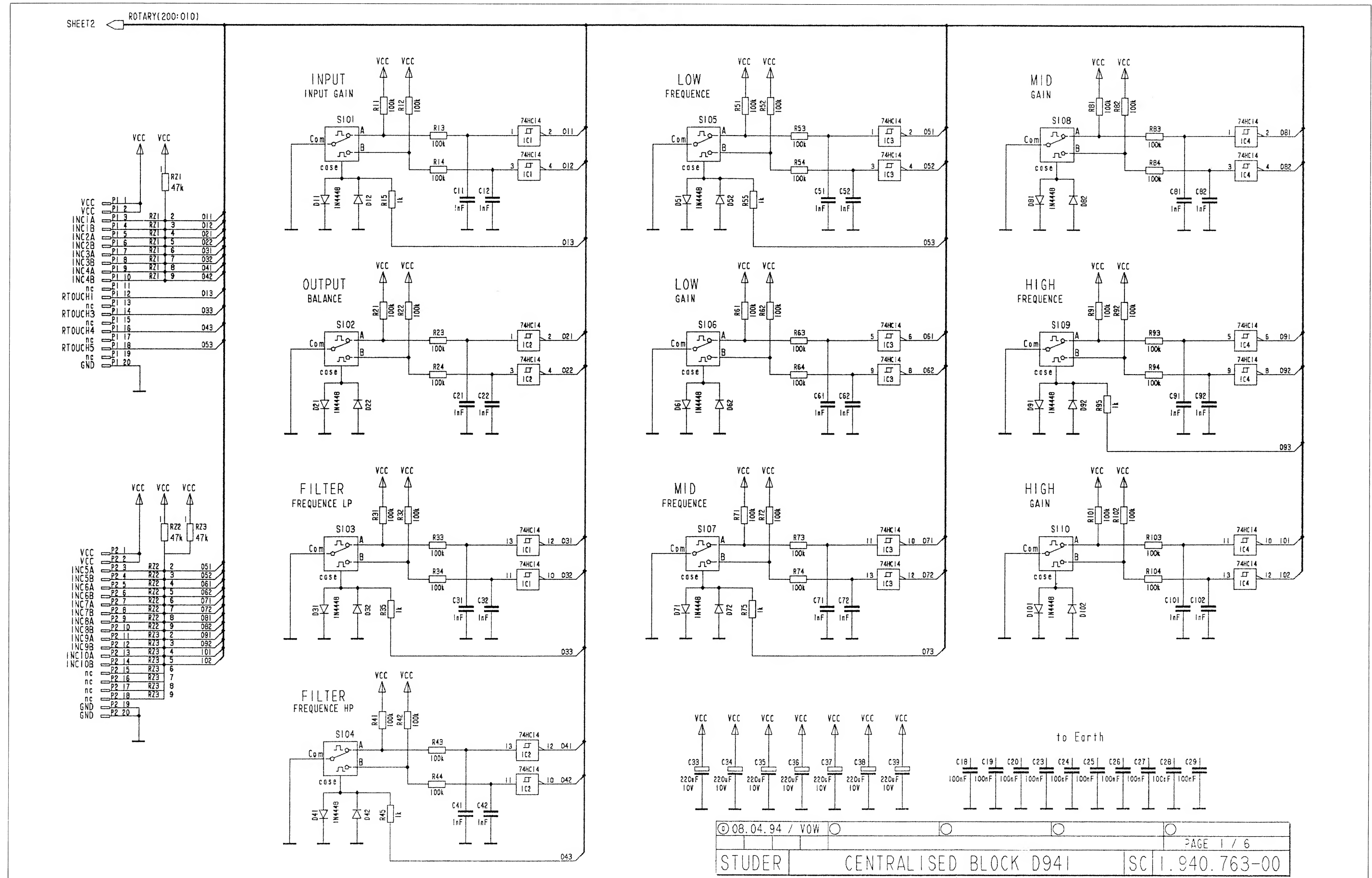
Surface Interface 1.940.712.21

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 23	50.17.1165		74HC165	IC ... 74 HC 165 .., ,A	0	R 42	57.11.3104		100k	MF, 1%, 0207
0	C 2	59.34.4101	100p		CER 63V, 5%, N750	0	IC 24	50.17.1165		74HC165	IC ... 74 HC 165 .., ,A	0	R 43	57.11.3203		20k	MF, 1%, 0207
0	C 3	59.22.6100	10u		EL 35V, 20%, RM5	0	IC 25	50.17.1014		74HC14	IC ... 74 HC 14 .., ,A	0	R 44	57.11.3101		100R	MF, 1%, 0207
0	C 4	59.34.4271	270p		CER 63V, 5%, N750	0	IC 26	50.17.1032		74HC32	IC ... 74 HC 32 .., ,A	0	R 45	57.11.3271		270R	MF, 1%, 0207
0	C 5	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 27	50.17.1074		74HC74	IC ... 74 HC 74 .., ,A	0	R 46	57.11.3103		10k	MF, 1%, 0207
0	C 6	59.34.1100	10p		CER 63V, 5%, NP 0	0	IC 28	50.17.1595		74HC595	IC ... 74 HC 595 .., ,A	0	R 47	57.11.3103		10k	MF, 1%, 0207
0	C 7	59.22.8109	1u		EL 50V, 20%, RM5	0	IC 29	50.17.1595		74HC595	IC ... 74 HC 595 .., ,A	0	R 48	57.11.3103		10k	MF, 1%, 0207
0	C 8	59.34.4101	100p		CER 63V, 5%, N750	0	IC 30	50.16.0301			IC PIC 16 C 57-HS/P ..,A	0	R 49	57.11.3103		10k	MF, 1%, 0207
					+ cap. 0...50pf parallel to C8 for adjustment	0	IC 31	50.17.1595		74HC595	IC ... 74 HC 595 .., ,A	0	RA 1	58.01.9203		20k	Cermet, 10%, 0.5W, vertical
0	C 9	59.06.0104	100n		PETP, 63V, 10%, RM5	0	IC 32	50.17.1595		74HC595	IC ... 74 HC 595 .., ,A	0	RZ 1	57.88.4473		8*47k	2%, SIP 9
0	C 10	59.22.6100	10u		EL 35V, 20%, RM5	0	JS 1	54.01.0021		Jumper	0.63 * 0.63mm	0	RZ 2	57.88.4473		8*47k	2%, SIP 9
0	C 11	59.06.0104	100n		PETP, 63V, 10%, RM5	0	MP 1	1.940.712.11	1 pce		SURFACE INTERFACE PCB /A	0	RZ 3	57.88.4473		8*47k	2%, SIP 9
0	C 12	59.06.0104	100n		PETP, 63V, 10%, RM5	0	MP 2	1.940.712.04	1 pce		NR-ETIKETTE 5 * 20	0	RZ 4	57.88.4473		8*47k	2%, SIP 9
0	C 13	59.06.0104	100n		PETP, 63V, 10%, RM5	0	MP 3	43.01.0108	1 pce	Label	ESE-WARNSCHILD	0	RZ 5	57.88.4473		8*47k	2%, SIP 9
0	C 14	59.06.0104	100n		PETP, 63V, 10%, RM5	0	MP 4	1.101.001.20	1 pce	Label	TEXT-ETIK. 5*20 HARDWARE -20	0	RZ 6	57.88.4473		8*47k	2%, SIP 9
0	C 15	59.06.0104	100n		PETP, 63V, 10%, RM5	0	MP 5	28.99.0119	2 pce		ROHRNIETE D 2.5*0.15* 9	0	RZ 7	57.88.4473		8*47k	2%, SIP 9
0	C 16	59.22.8109	1u		EL 50V, 20%, RM5	0	MP 6	65.99.0167	10 mm	Tape	POLYURH. KLEBBAND WS, 9* 3	0	RZ 8	57.88.4103		8*10k	2%, SIP 9
0	C 17	59.06.0104	100n		PETP, 63V, 10%, RM5	1	MP 7	29.99.0134		1.8*5	Lötspirale Cu Sn	0	RZ 9	57.88.4103		8*10k	2%, SIP 9
0	C 18	59.06.0104	100n		PETP, 63V, 10%, RM5	1	MP 8	43.10.0110		A	Revisions-Etikette 5mm h'blau						
0	C 19	59.06.0104	100n		PETP, 63V, 10%, RM5	0	P 1	54.11.2004		64-P	P EU-B 2 * 32						
0	C 20	59.06.0104	100n		PETP, 63V, 10%, RM5	0	P 2	54.16.0534		34p	P 1/40", 34 P, AU, PRINT	0	XIC 15	53.03.0173		28p	DIL 0.6", lot, gerade
0	C 21	59.22.6100	10u		EL 35V, 20%, RM5	0	P 3	54.16.0534		34p	P 1/40", 34 P, AU, PRINT	0	XIC 30	53.03.0173		28p	DIL 0.6", lot, gerade
0	C 22	59.34.2101	100p		CER 63V, 5%, N150	0	P 4	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE						
0	C 23	59.22.6100	10u		EL 35V, 20%, RM5	0	P 5	54.14.2103		20p	P STECKER 20 P,AU,VR,GERADE						
0	C 24	59.06.0104	100n		PETP, 63V, 10%, RM5	0	P 6	54.14.2103		20p	P STECKER 20 P,AU,VR,GERADE						
0	C 25	59.06.0104	100n		PETP, 63V, 10%, RM5	0	P 7	54.14.2103		20p	P STECKER 20 P,AU,VR,GERADE						
0	C 26	59.22.4221	220u		EL 16V, 20%, RM5	0	P 8	54.14.2103		20p	P STECKER 20 P,AU,VR,GERADE						
0	C 27	59.06.0104	100n		PETP, 63V, 10%, RM5	0	P 9	54.02.0320		1p	Flatpin, 2.8*0.8mm						
0	C 28	59.06.0104	100n		PETP, 63V, 10%, RM5	0	P 10	54.02.0320		1p	Flatpin, 2.8*0.8mm						
0	C 29	59.06.0222	2n2		PETP, 63V, 10%, RM5	0	P 11	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54						
0	C 30	59.06.0104	100n		PETP, 63V, 10%, RM5	0	P 12	not used		1p	Pin 0.63*0.63						
0	C 31	59.06.0104	100n		PETP, 63V, 10%, RM5						see P11						
0	C 32	59.06.0104	100n		PETP, 63V, 10%, RM5	0	P 13	not used		1p	Pin 0.63*0.63						
0	C 33	59.06.0104	100n		PETP, 63V, 10%, RM5						see P11						
0	C 34	59.06.0104	100n		PETP, 63V, 10%, RM5	0	P 14	not used		1p	Pin 0.63*0.63						
0	C 35	59.06.0104	100n		PETP, 63V, 10%, RM5						see P11						
0	C 36	59.06.0104	100n		PETP, 63V, 10%, RM5	0	P 15	not used		1p	Pin 0.63*0.63						
0	C 37	59.06.0104	100n		PETP, 63V, 10%, RM5						see P11						
0	C 38	59.06.0104	100n		PETP, 63V, 10%, RM5	0	P 16	not used		1p	Pin 0.63*0.63						
0	C 39	59.06.0104	100n		PETP, 63V, 10%, RM5						see P11						
0	C 40	59.34.1150	15p		CER 63V, 5%, NP 0						see P11						
0	C 41	59.34.1150	15p		CER 63V, 5%, NP 0	0	Q 1	50.03.0407		BC550C	BC 550 C						
0	C 42	59.22.4221	220u		EL 16V, 20%, RM5	0	Q 2	50.03.0407		BC550C	BC 550 C						
0	C 43	59.06.0104	100n		PETP, 63V, 10%, RM5	0	R 1	57.11.3103		10k	MF, 1%, 0207						
0	C 44	59.06.0104	100n		PETP, 63V, 10%, RM5	0	R 2	57.11.3102		1k0	MF, 1%, 0207						
0	C 45	59.22.8470	47u		EL 63V, 20%, RM5	0	R 3	57.11.3101		100R	MF, 1%, 0207						
0	C 46	59.06.0104	100n		PETP, 63V, 10%, RM5	0	R 4	57.11.3103		10k	MF, 1%, 0207						
0	D 1	50.04.0127	BAT85		200mA, Schottky	0	R 5	57.11.3113		11k	MF, 1%, 0207						
0	D 2	50.04.0127	BAT85		200mA, Schottky	0	R 6	57.11.3331		330R	MF, 1%, 0207						
0	D 3	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	R 7	57.11.3331		330R	MF, 1%, 0207						
0	D 4	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	R 8	57.11.3271		270R	MF, 1%, 0207						
0	D 5	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	R 9	57.11.3821		820R	MF, 1%, 0207						
0	D 6	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	R 10	57.11.5475		4M7	MF, 5%, 0207						
0	D 7	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	R 11	57.11.3102		1k0	MF, 1%, 0207						
0	D 8	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	R 12	57.11.3104		100k	MF, 1%, 0207						
0	D 9	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	R 13	57.11.3105		1M0	MF, 1%, 0207						
0	D 10	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	R 14	57.11.3221		220R	MF, 1%, 0207						
0	D 11	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	R 15	57.11.5475		4M7	MF, 5%, 0207						
0	D 12	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	R 16	57.11.3101		100R	MF, 1%, 0207						
0	D 13	50.04.0127	BAT85		200mA, Schottky	0	R 17	57.11.3101		100R	MF, 1%, 0207						
0	D 14	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	R 18	57.11.3101		100R	MF, 1%, 0207						
1	D 15	50.04.0125	1N4448		75V, 150mA, 4ns, DO-35	0	R 19	57.11.3101		100R	MF, 1%, 0207						
0	DL 1	50.04.2121	TLUR 2401	DL	TLUR 2401 RT MATT	0	R 20	57.11.3152		1k5	MF, 1%, 0207						
0	IC 1	50.10.0106	TL431		Shunt regulator	0	R 21	57.11.3152		1k5	MF, 1%, 0207						
0	IC 2	50.09.0101	TL072		IC TL 072 CN ..,A	0	R 22	57.11.3472		4k7	MF, 1%, 0207						
0	IC 3	50.17.1138	74HC138		IC ... 74 HC 138 .., ,A	0	R 23	57.11.3472		4k7	MF, 1%, 0207						
0	IC 4	50.17.1138	74HC138		IC ... 74 HC 138 .., ,A	0	R 24	57.11.3154		150k	MF, 1%, 0207						
0	IC 5	50.10.0109	LM337L		Series regulator 100mA ...-37V	0	R 25	57.11.3473		47k	MF, 1%, 0207						
0	IC 6	50.17.4051			IC ... 74 HC 4051 .., ,A	0	R 26	57.11.3271		270R	MF, 1%, 0207						
0	IC 7	50.09.0103	TL071		IC TL 071 CP ..,A	0	R 27	57.11.3821		820R	MF, 1%, 0207						
0	IC 8	50.09.0127	MC33282		Dual Op-Amp BIFET DIP 8	0	R 28	57.11.3101		100R	MF, 1%, 0207						
0	IC 9	50.17.1138	74HC138		IC ... 74 HC 138 .., ,A	0	R 29	57.11.3101		100R	MF, 1%, 0207						
0	IC 10	50.17.1165	74HC165		IC ... 74 HC 165 .., ,A	0	R 30	57.11.3101		100R	MF, 1%, 0207						
0	IC 11	50.17.1165	74HC165		IC ... 74 HC 165 .., ,A	0	R 31	57.11.3101		100R	MF, 1%, 0207						
0	IC 12	50.17.1165	74HC165		IC ... 74 HC 165 .., ,A	0	R 32	57.11.3331		330R	MF, 1%, 0207						
0	IC 13	50.17.1074	74HC 74		IC ... 74 HC 74 .., ,A	0	R 33	57.11.3331		330R	MF, 1%, 0207						
0	IC 14	50.10.0109	LM337L		Series regulator 100mA ...-37V	0	R 34	57.11.3101		100R	MF, 1%, 0207						
0	IC 15	50.19.0204	ADS7832		A/D Converter 12bit 4ch mux	0	R 35	57.11.3101		100R	MF, 1%, 0207						
0	IC 16	not used	not used		not used	0	R 36	57.11.3101		100R	MF, 1%, 0207						
0	IC 17	50.17.1032	74HC 32		IC ... 74 HC 32 .., ,A	0	R 37	57.11.3101		100R	MF, 1%, 0207						
0																	





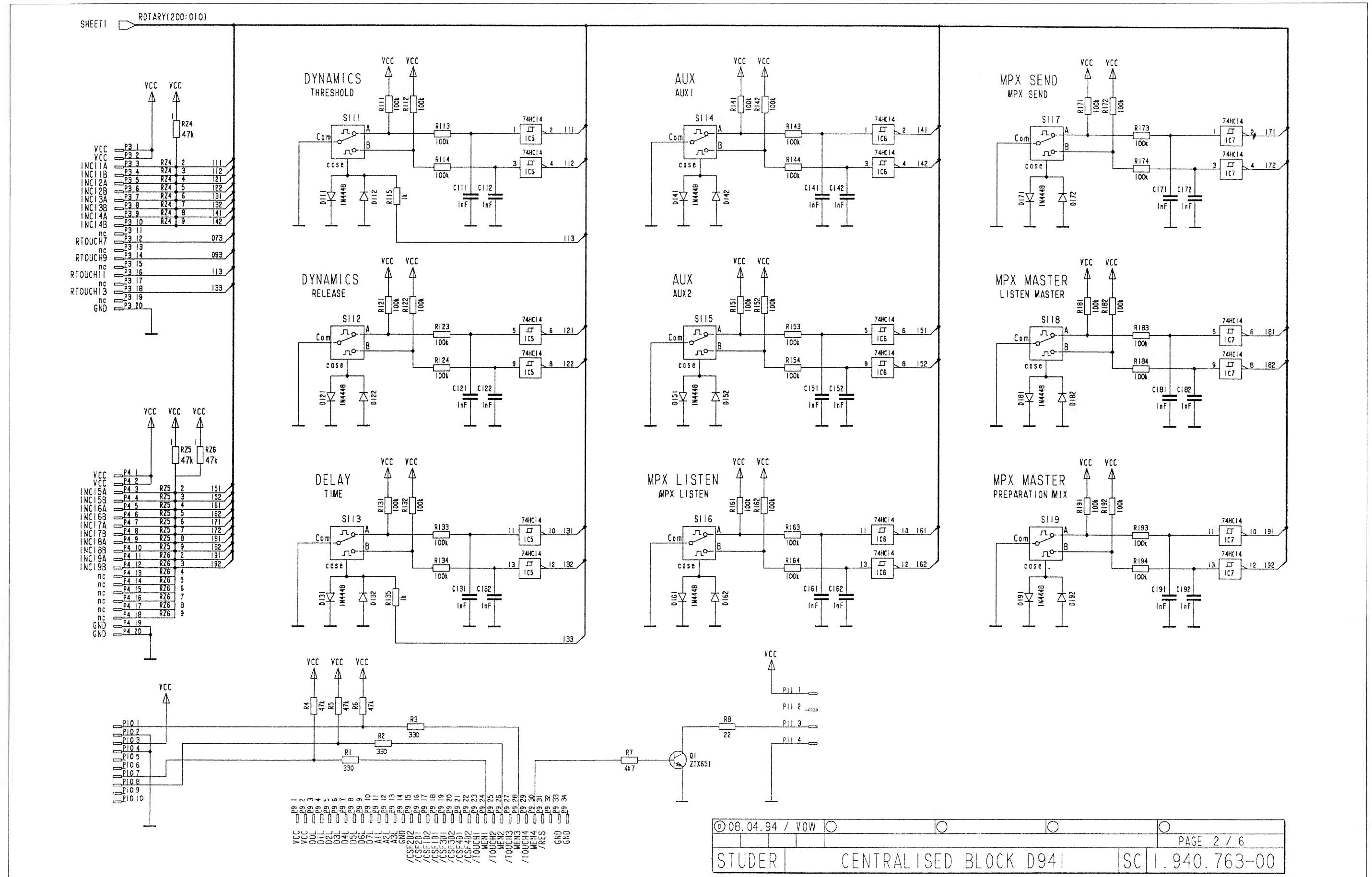
**Centralized Front Board 1.940.763.00**





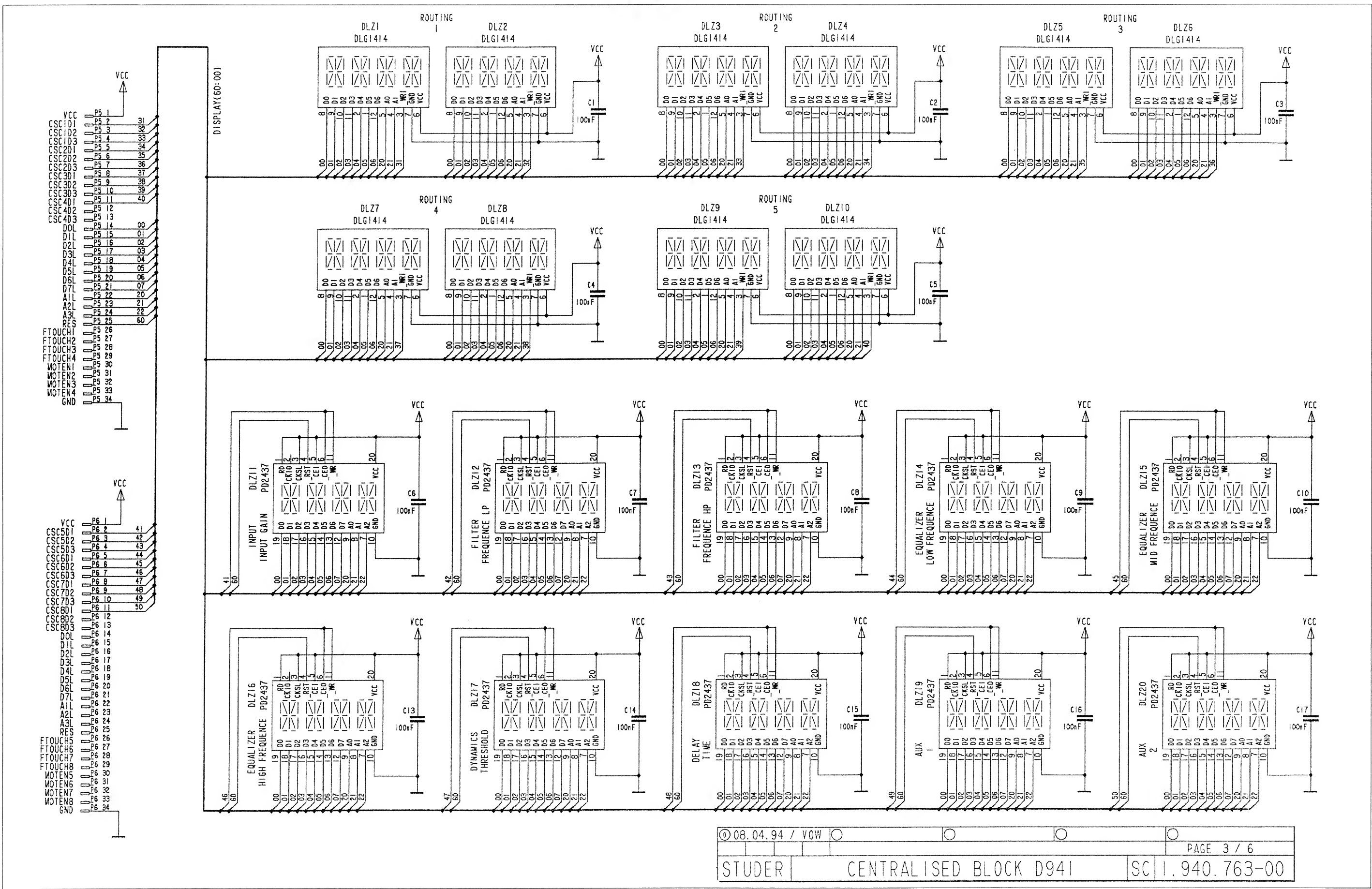


**Centralized Front Board 1.940.763.00**



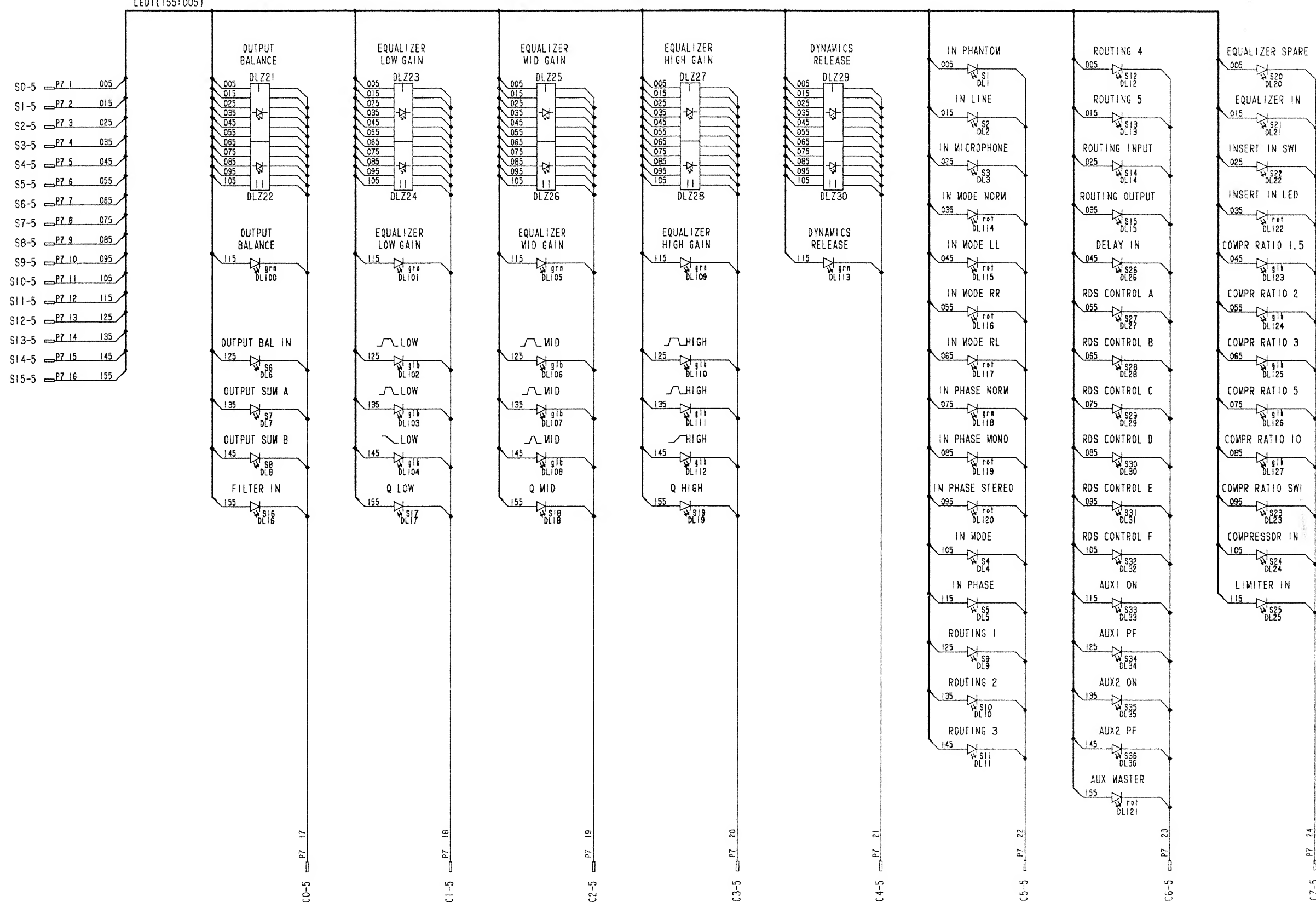


Centralized Front Board I.940.763.00



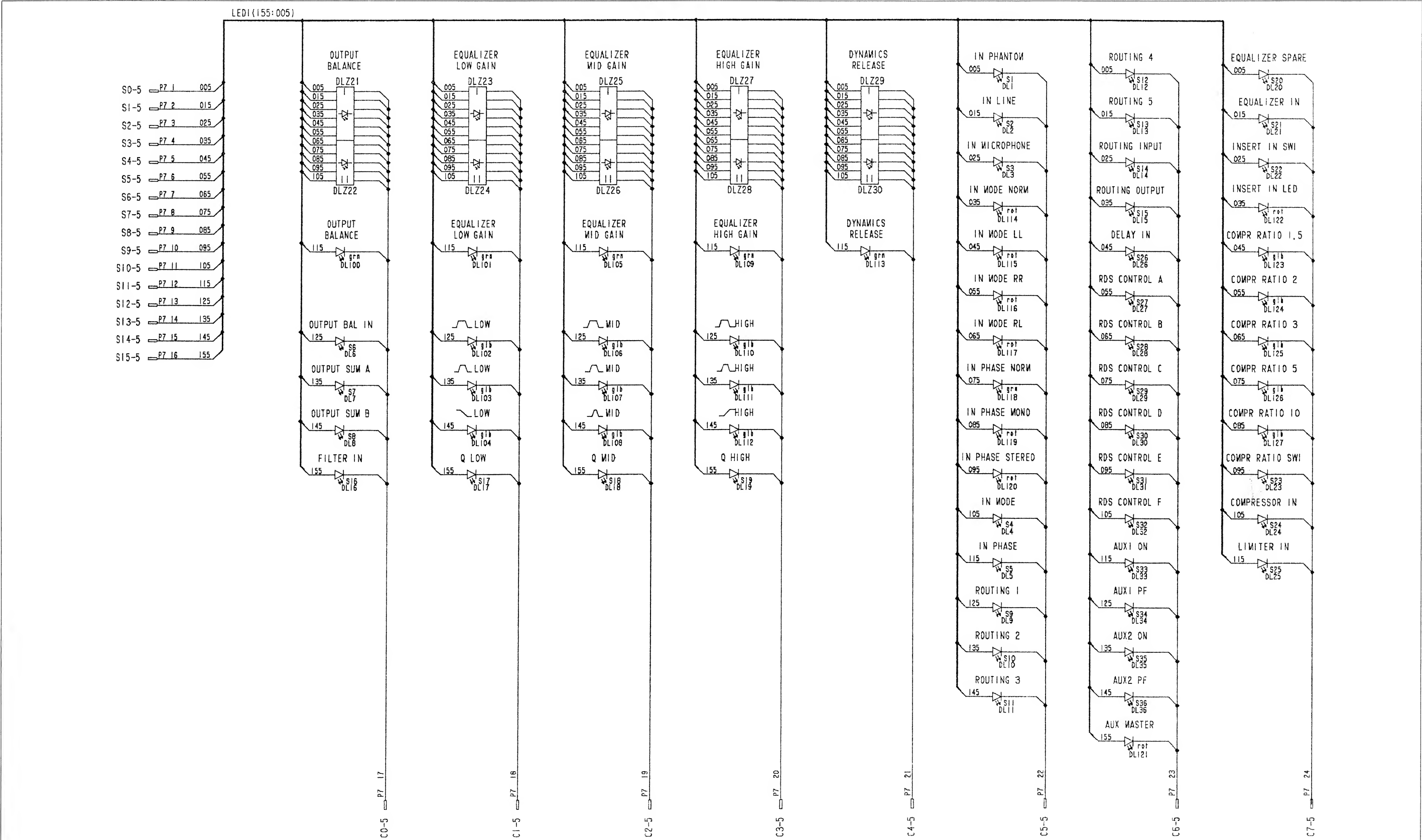


## LED1(155:005)



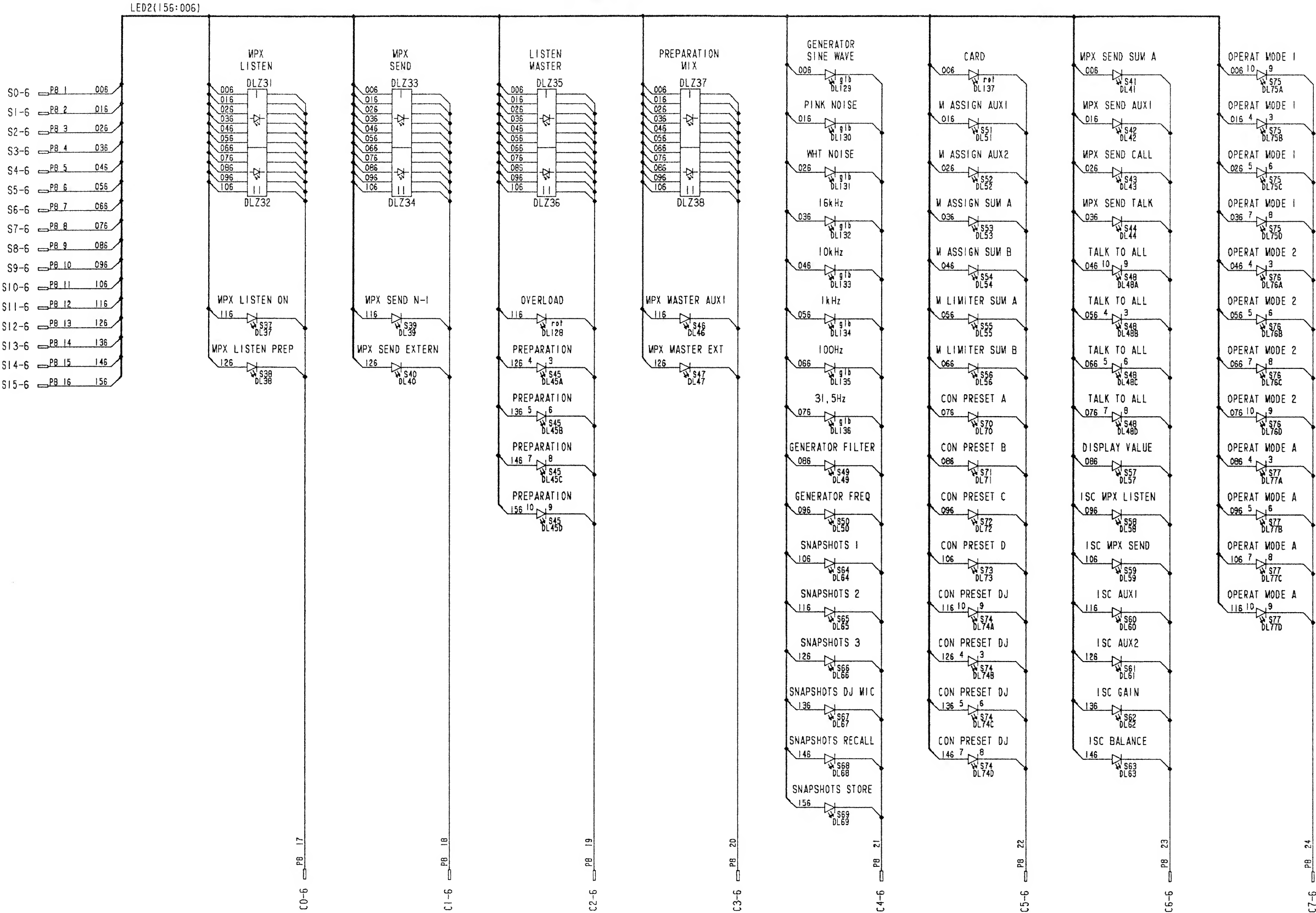


Centralized Front Board I.940.763.00



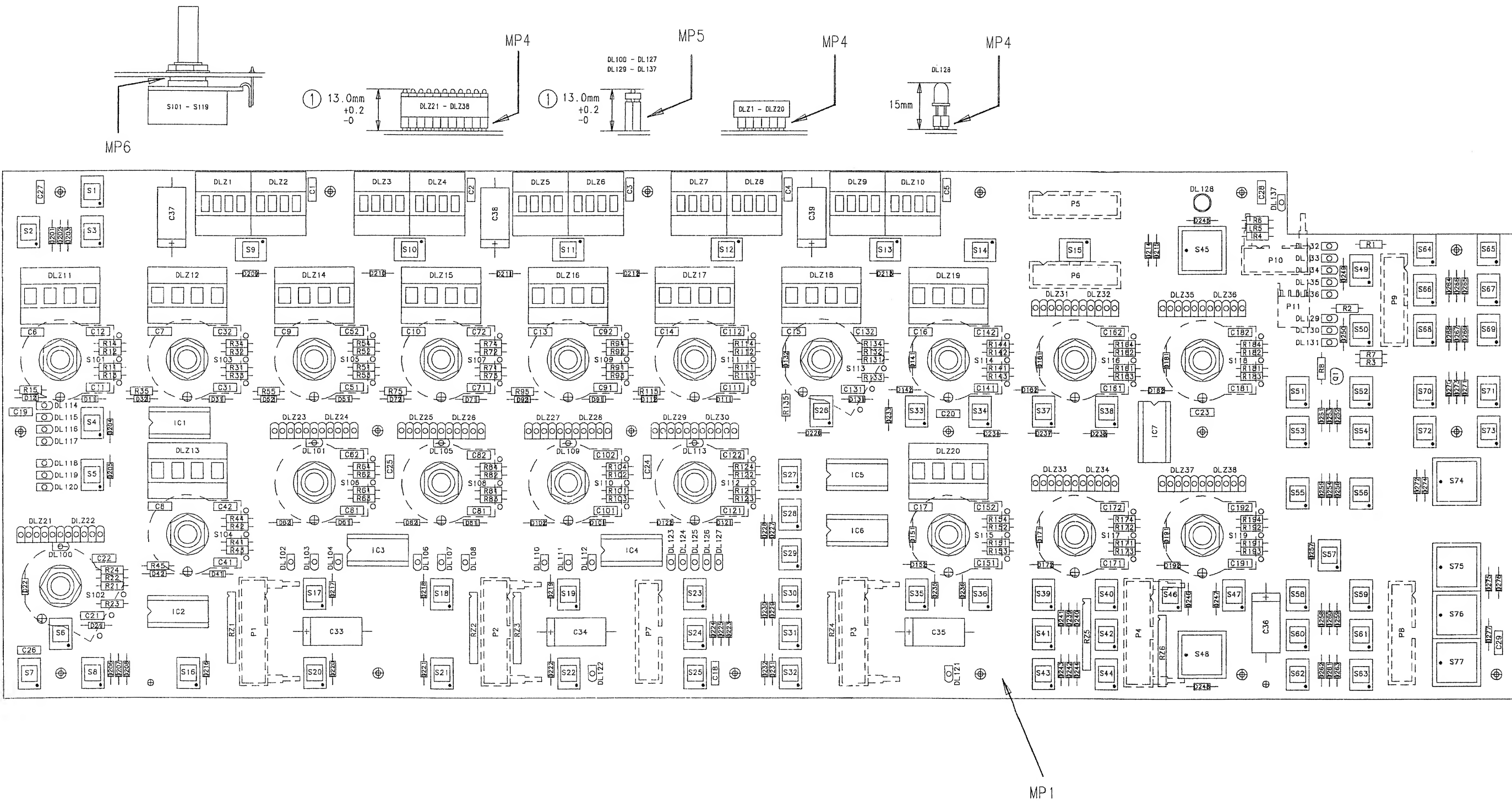


Centralized Front Board 1.940.763.00





Centralized Front Board 1.940.763.00



Edition Ausgabe	Date Datum	Vism Gez.	Geht Gepr.	Sein Ges.	Index	1
						2
						3
						4
Copy to:						
Kopie fuer:						
Number:						
Number: 1.940.763-00						





Centralized Front Board 1.940.763.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 91	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 266	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	DLZ 37	50.04.2812		DLZ 11"D GB		
0	C 2	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 92	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 267	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	DLZ 38	not used	not used	not used		
0	C 3	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 101	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 268	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	C 4	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 102	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 269	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	IC 1	50.17.1014	74HC14	IC ... 74 HC 14 ..	,A	
0	C 5	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 111	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 270	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	IC 2	50.17.1014	74HC14	IC ... 74 HC 14 ..	,A	
0	C 6	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 112	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 271	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	IC 3	50.17.1014	74HC14	IC ... 74 HC 14 ..	,A	
0	C 7	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 121	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 272	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	IC 4	50.17.1014	74HC14	IC ... 74 HC 14 ..	,A	
0	C 8	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 122	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 273	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	IC 5	50.17.1014	74HC14	IC ... 74 HC 14 ..	,A	
0	C 9	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 131	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 274	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	IC 6	50.17.1014	74HC14	IC ... 74 HC 14 ..	,A	
0	C 10	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 132	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 275	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	IC 7	50.17.1014	74HC14	IC ... 74 HC 14 ..	,A	
0	C 11	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 141	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 276	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							
0	C 12	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 142	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	D 277	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	MP 1	1.940.761.11	1 pce	CENTRALIZED FRONT PCB	/\	
0	C 13	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 151	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							0	MP 2	43.01.0108	1 pce	Label	ESE-WARNSCHILD	
0	C 14	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 152	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 100	50.04.2132	TLUG 2401	DL TLUG 2401	GN MATT	0	MP 3	1.940.763.04	1 pce		NR-ETIKETTE 5 * 20
0	C 15	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 161	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 101	50.04.2132	TLUG 2401	DL TLUG 2401	GN MATT	0	MP 4	53.03.0218	518 pc	1p	XIC SINGLE, IN-LINE 1PIN=1STK
0	C 16	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 162	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 102	50.04.2132	TLUY 2401	DL TLUY 2401	GB MATT	1	MP 5	53.03.0240	36 pcs		XLED SINGLE LINE, 2 POL. PRINT
0	C 17	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 171	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 103	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	MP 6	1.010.091.23	19 pcs		DISTANZSCHEIBE D 9.0/12* 1.2
0	C 18	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 172	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 104	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT						
0	C 19	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 181	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 105	50.04.2132	TLUG 2401	DL TLUG 2401	GN MATT	0	P 1	54.14.2103	20p		P STECKER 20 P,AU,VR,GERADE
0	C 20	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 182	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 106	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	P 2	54.14.2103	20p		P STECKER 20 P,AU,VR,GERADE
0	C 21	59.03.0102	1n0	PETP, 63V, 10%, RM5		0	D 191	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 107	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	P 3	54.14.2103	20p		P STECKER 20 P,AU,VR,GERADE
0	C 22	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 192	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 108	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	P 4	54.14.2103	20p		P STECKER 20 P,AU,VR,GERADE
0	C 23	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 201	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 109	50.04.2132	TLUG 2401	DL TLUG 2401	GN MATT	0	P 5	54.16.0534	34p		P 1/40", 34 P, AU, PRINT
0	C 24	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 202	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 110	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	P 6	54.16.0534	34p		P 1/40", 34 P, AU, PRINT
0	C 25	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 203	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 111	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	P 7	54.16.0540	40p		P 1/40", 40 P, AU, PRINT
0	C 26	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 204	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 112	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	P 8	54.16.0540	40p		P 1/40", 40 P, AU, PRINT
0	C 27	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 205	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 113	50.04.2132	TLUG 2401	DL TLUG 2401	GN MATT	0	P 9	54.16.0534	34p		P 1/40", 34 P, AU, PRINT
0	C 28	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 206	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 114	50.04.2121	TLUR 2401	DL TLUR 2401	RT MATT	0	P 10	54.14.2101	10p		P STECKER 10 P,AU,VR,GERADE
0	C 29	59.06.0104	100n	PETP, 63V, 10%, RM5		0	D 207	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 115	50.04.2121	TLUR 2401	DL TLUR 2401	RT MATT	2	P 11	54.12.0724	4p		Stecker winkel PCB
0	C 31	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 208	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 116	50.04.2121	TLUR 2401	DL TLUR 2401	RT MATT						
0	C 32	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 209	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 117	50.04.2121	TLUR 2401	DL TLUR 2401	RT MATT	0	Q 1	50.03.0523	ZTX651	ZTX 651	
0	C 33	59.25.2221	220u	C-EL, 20%, 10V		0	D 210	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 118	50.04.2132	TLUG 2401	DL TLUG 2401	GN MATT						
0	C 34	59.25.2221	220u	C-EL, 20%, 10V		0	D 211	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 119	50.04.2121	TLUR 2401	DL TLUR 2401	RT MATT	0	R 1	57.11.3331	330R	MF, 1%, 0207	
0	C 35	59.25.2221	220u	C-EL, 20%, 10V		0	D 212	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 120	50.04.2121	TLUR 2401	DL TLUR 2401	RT MATT	0	R 2	57.11.3331	330R	MF, 1%, 0207	
0	C 36	59.25.2221	220u	C-EL, 20%, 10V		0	D 213	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 121	50.04.2121	TLUR 2401	DL TLUR 2401	RT MATT	0	R 3	57.11.3331	330R	MF, 1%, 0207	
0	C 37	59.25.2221	220u	C-EL, 20%, 10V		0	D 214	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		1	DL 122	not used	TLUR 2401	DL TLUR 2401	RT MATT	0	R 4	57.11.3473	47k	MF, 1%, 0207	
0	C 38	59.25.2221	220u	C-EL, 20%, 10V		0	D 215	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 123	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	R 5	57.11.3473	47k	MF, 1%, 0207	
0	C 39	59.25.2221	220u	C-EL, 20%, 10V		0	D 216	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 124	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	R 6	57.11.3473	47k	MF, 1%, 0207	
0	C 41	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 217	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 125	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	R 7	57.11.3472	4k7	MF, 1%, 0207	
0	C 42	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 218	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 126	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	R 8	57.11.3220	22R	MF, 1%, 0207	
0	C 51	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 219	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 127	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	R 11	57.11.3104	100k	MF, 1%, 0207	
0	C 62	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 220	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 128	50.04.2502	HLM4700	DL HLM4700	RT	0	R 12	57.11.3104	100k	MF, 1%, 0207	
0	C 61	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 221	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 129	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	R 13	57.11.3104	100k	MF, 1%, 0207	
0	C 62	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 222	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 130	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	R 14	57.11.3104	100k	MF, 1%, 0207	
0	C 71	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 223	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 131	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	R 15	57.11.3102	1k0	MF, 1%, 0207	
0	C 72	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 224	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 132	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	R 21	57.11.3104	100k	MF, 1%, 0207	
0	C 81	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 225	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 133	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	R 22	57.11.3104	100k	MF, 1%, 0207	
0	C 82	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 226	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35		0	DL 134	50.04.2133	TLUY 2401	DL TLUY 2401	GB MATT	0	R 23	57.11.3104	100k	MF, 1%, 0207	
0	C 91	59.06.0102	1n0	PETP, 63V, 10%, RM5		0	D 227	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													



## Centralized Front Board 1.940.763.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 112	57.11.3104	100k	MF, 1%, 0207		0	S 43	55.15.0622	1*a	S	TASTE 1*A, 5MM, RT/RT
0	R 113	57.11.3104	100k	MF, 1%, 0207		0	S 44	55.15.0655	1*a	S	TASTE 1*A, 5MM, GN/GN
0	R 114	57.11.3104	100k	MF, 1%, 0207		0	S 45	55.15.0744	1*a	S	TASTE 1*A, 12MM, GB/GB
0	R 115	57.11.3102	1k0	MF, 1%, 0207		0	S 46	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 121	57.11.3104	100k	MF, 1%, 0207		0	S 47	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 122	57.11.3104	100k	MF, 1%, 0207		0	S 48	55.15.0755	1*a	S	TASTE 1*A, 12MM, GN/GN
0	R 123	57.11.3104	100k	MF, 1%, 0207		0	S 49	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 124	57.11.3104	100k	MF, 1%, 0207		0	S 50	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 131	57.11.3104	100k	MF, 1%, 0207		0	S 51	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 132	57.11.3104	100k	MF, 1%, 0207		0	S 52	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 133	57.11.3104	100k	MF, 1%, 0207		0	S 53	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 134	57.11.3104	100k	MF, 1%, 0207		0	S 54	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 135	57.11.3102	1k0	MF, 1%, 0207		0	S 55	55.15.0622	1*a	S	TASTE 1*A, 5MM, RT/RT
0	R 141	57.11.3104	100k	MF, 1%, 0207		0	S 56	55.15.0622	1*a	S	TASTE 1*A, 5MM, RT/RT
0	R 142	57.11.3104	100k	MF, 1%, 0207		0	S 57	55.15.0622	1*a	S	TASTE 1*A, 5MM, RT/RT
0	R 143	57.11.3104	100k	MF, 1%, 0207		0	S 58	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 144	57.11.3104	100k	MF, 1%, 0207		0	S 59	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 151	57.11.3104	100k	MF, 1%, 0207		0	S 60	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 152	57.11.3104	100k	MF, 1%, 0207		0	S 61	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 153	57.11.3104	100k	MF, 1%, 0207		0	S 62	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 154	57.11.3104	100k	MF, 1%, 0207		0	S 63	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 161	57.11.3104	100k	MF, 1%, 0207		0	S 64	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 162	57.11.3104	100k	MF, 1%, 0207		0	S 65	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 163	57.11.3104	100k	MF, 1%, 0207		0	S 66	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 164	57.11.3104	100k	MF, 1%, 0207		0	S 67	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 171	57.11.3104	100k	MF, 1%, 0207		0	S 68	55.15.0655	1*a	S	TASTE 1*A, 5MM, GN/GN
0	R 172	57.11.3104	100k	MF, 1%, 0207		0	S 69	55.15.0622	1*a	S	TASTE 1*A, 5MM, RT/RT
0	R 173	57.11.3104	100k	MF, 1%, 0207		0	S 70	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 174	57.11.3104	100k	MF, 1%, 0207		0	S 71	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 181	57.11.3104	100k	MF, 1%, 0207		0	S 72	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 182	57.11.3104	100k	MF, 1%, 0207		0	S 73	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB
0	R 183	57.11.3104	100k	MF, 1%, 0207		0	S 74	55.15.0744	1*a	S	TASTE 1*A, 12MM, GB/GB
0	R 184	57.11.3104	100k	MF, 1%, 0207		1	S 75	55.15.0722	1*a	S	TASTE 1*A, 12MM, RT/RT
0	R 191	57.11.3104	100k	MF, 1%, 0207		1	S 76	55.15.0722	1*a	S	TASTE 1*A, 12MM, RT/RT
0	R 192	57.11.3104	100k	MF, 1%, 0207		0	S 77	55.15.0722	1*a	S	TASTE 1*A, 12MM, RT/RT
0	R 193	57.11.3104	100k	MF, 1%, 0207		0	S 101	1.940.751.02			ROTARY ENCODER
0	R 194	57.11.3104	100k	MF, 1%, 0207		0	S 102	1.940.751.02			ROTARY ENCODER
0	RZ 1	57.88.4473	8*47k	2%, SIP 9		0	S 103	1.940.751.02			ROTARY ENCODER
0	RZ 2	57.88.4473	8*47k	2%, SIP 9		0	S 104	1.940.751.02			ROTARY ENCODER
0	RZ 3	57.88.4473	8*47k	2%, SIP 9		0	S 105	1.940.751.02			ROTARY ENCODER
0	RZ 4	57.88.4473	8*47k	2%, SIP 9		0	S 106	1.940.751.02			ROTARY ENCODER
0	RZ 5	57.88.4473	8*47k	2%, SIP 9		0	S 107	1.940.751.02			ROTARY ENCODER
0	RZ 6	57.88.4473	8*47k	2%, SIP 9		0	S 108	1.940.751.02			ROTARY ENCODER
0	S 1	55.15.0655	1*a	S	TASTE 1*A, 5MM, GN/GN	0	S 109	1.940.751.02			ROTARY ENCODER
0	S 2	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB	0	S 110	1.940.751.02			ROTARY ENCODER
0	S 3	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB	0	S 111	1.940.751.02			ROTARY ENCODER
0	S 4	55.15.0622	1*a	S	TASTE 1*A, 5MM, RT/RT	0	S 112	1.940.751.02			ROTARY ENCODER
0	S 5	55.15.0622	1*a	S	TASTE 1*A, 5MM, RT/RT	0	S 113	1.940.751.02			ROTARY ENCODER
0	S 6	55.15.0622	1*a	S	TASTE 1*A, 5MM, RT/RT	0	S 114	1.940.751.02			ROTARY ENCODER
0	S 7	55.15.0655	1*a	S	TASTE 1*A, 5MM, GN/GN	0	S 115	1.940.751.02			ROTARY ENCODER
0	S 8	55.15.0655	1*a	S	TASTE 1*A, 5MM, GN/GN	0	S 116	1.940.751.02			ROTARY ENCODER
0	S 9	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB	0	S 117	1.940.751.02			ROTARY ENCODER
0	S 10	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB	0	S 118	1.940.751.02			ROTARY ENCODER
0	S 11	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB	0	S 119	1.940.751.02			ROTARY ENCODER
0	S 12	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 13	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 14	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 15	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 16	55.15.0622	1*a	S	TASTE 1*A, 5MM, RT/RT						
0	S 17	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 18	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 19	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
3	S 20	55.15.0622	1*a	S	TASTE 1*A, 5MM, RT/RT						
0	S 21	55.15.0622	1*a	S	TASTE 1*A, 5MM, RT/RT						
0	S 22	not used		not used							
0	S 23	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 24	55.15.0622	1*a	S	TASTE 1*A, 5MM, RT/RT						
0	S 25	55.15.0622	1*a	S	TASTE 1*A, 5MM, RT/RT						
0	S 26	55.15.0622	1*a	S	TASTE 1*A, 5MM, RT/RT						
0	S 27	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 28	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 29	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 30	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 31	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 32	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 33	55.15.0655	1*a	S	TASTE 1*A, 5MM, GN/GN						
0	S 34	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 35	55.15.0655	1*a	S	TASTE 1*A, 5MM, GN/GN						
0	S 36	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 37	55.15.0655	1*a	S	TASTE 1*A, 5MM, GN/GN						
0	S 38	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 39	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 40	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 41	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						
0	S 42	55.15.0644	1*a	S	TASTE 1*A, 5MM, GB/GB						

End of List

## Comments:

(01) S75 and S76 additional inserted  
 (02) P11 54.99.0185 changed to 54.12.0724

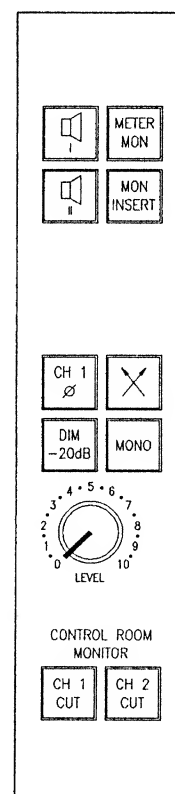
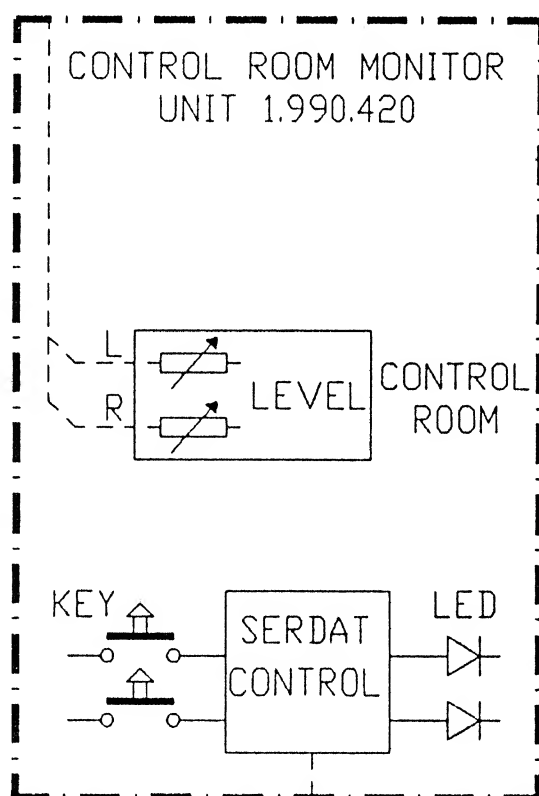


**SCHEMATA / CIRCUIT DIAGRAMS**

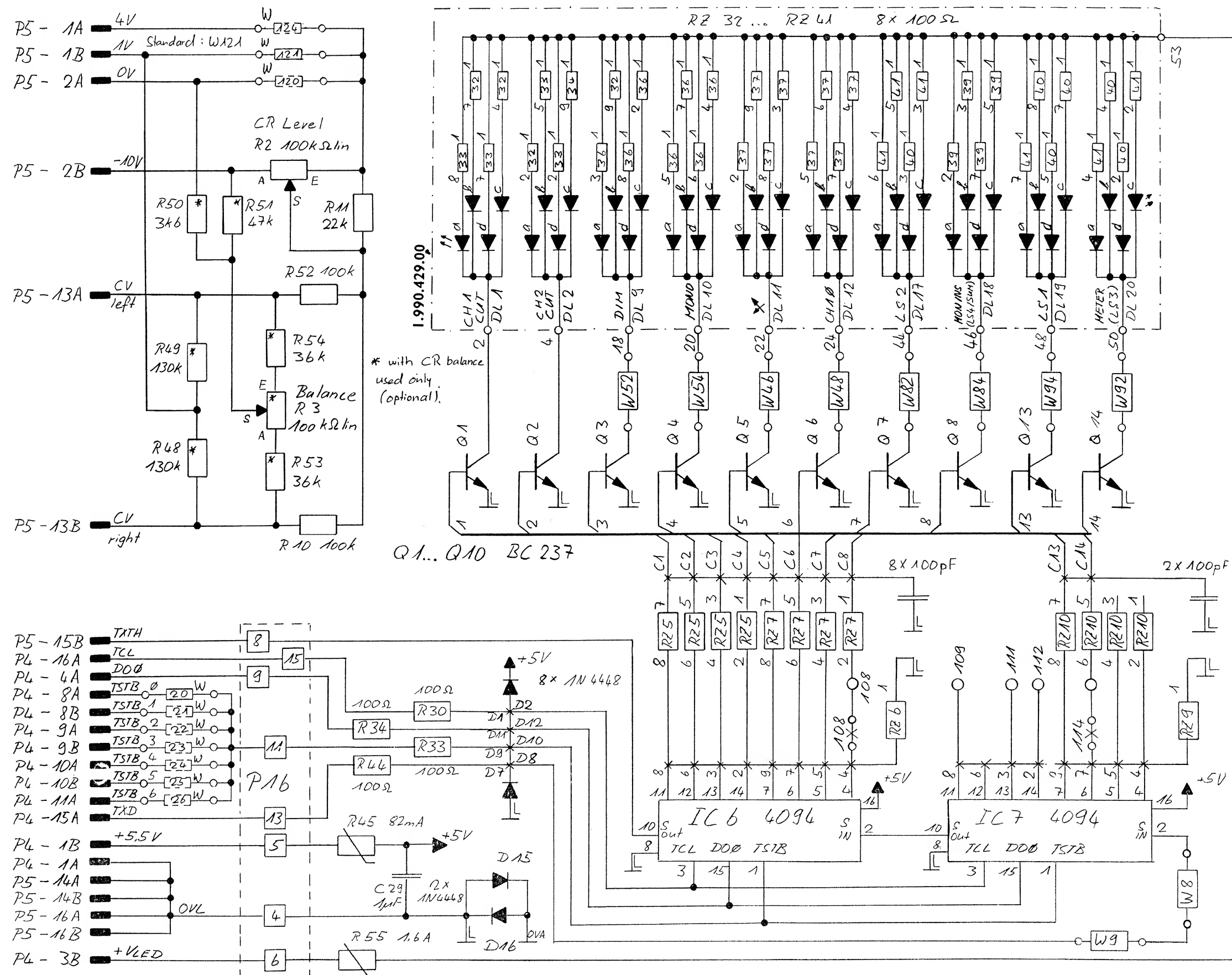
**Monitor Units**

CR Monitor Control Unit .....	1.990.420.00
CR Monitor Control Unit .....	1.990.420.00
- CR Monitor Switch Board .....	1.990.429.00
Studio Monitor Control Unit .....	1.990.430.00
Studio Monitor Control Unit .....	1.990.430.00
- Studio Monitor Switch Board .....	1.990.439.00
PFL/Talk Back Headphone Unit .....	1.990.440.00
PFL/Talk Back Headphone Unit .....	1.990.440.00
- PFL/Talk Back Switch Board .....	1.990.449.00
Source Selector Unit .....	1.990.490.00
Source Selector Unit .....	1.990.498.00
- Source Selector Switch Board .....	1.990.499.00

## CR Monitor Control Unit 1.990.420.00

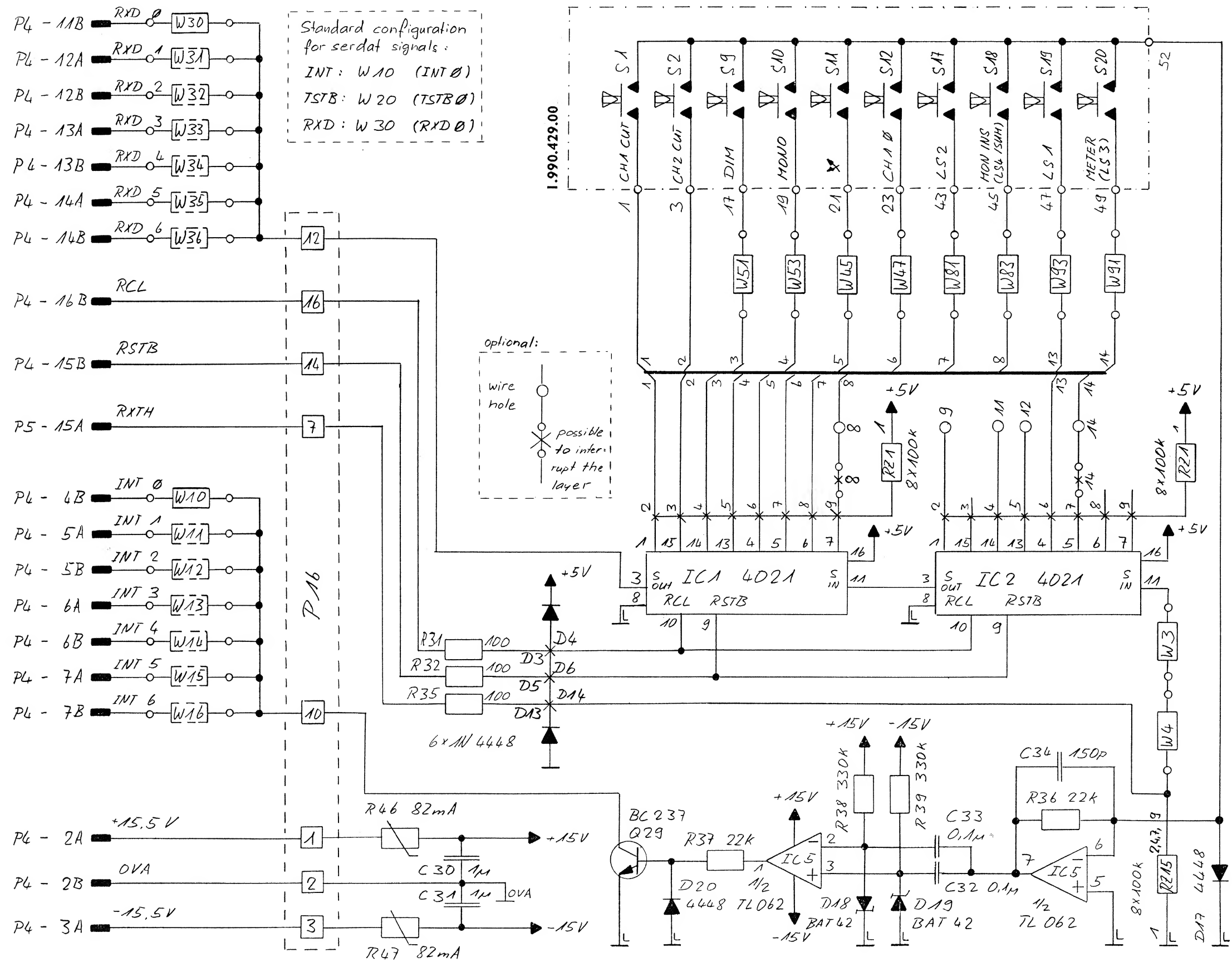


**CR Monitor Control Unit 1.990.420.00**  
**- CR Monitor Switch Board 1.990.429.00**

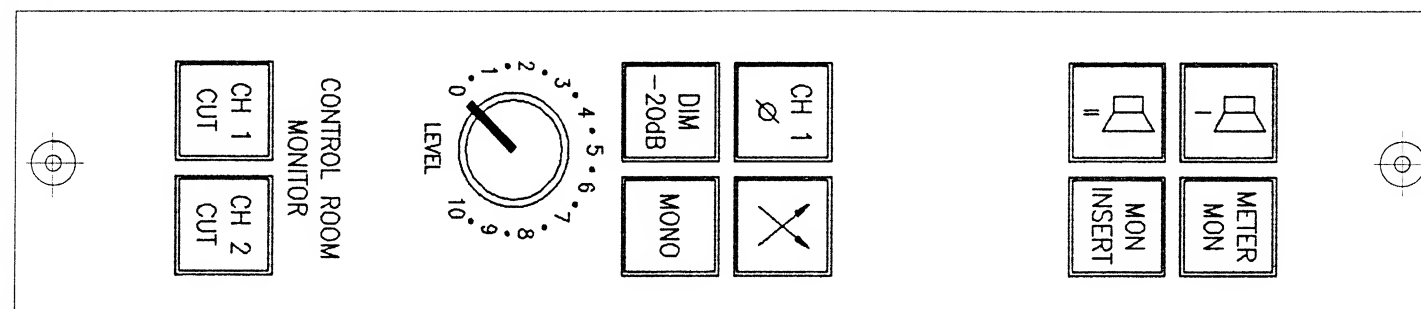
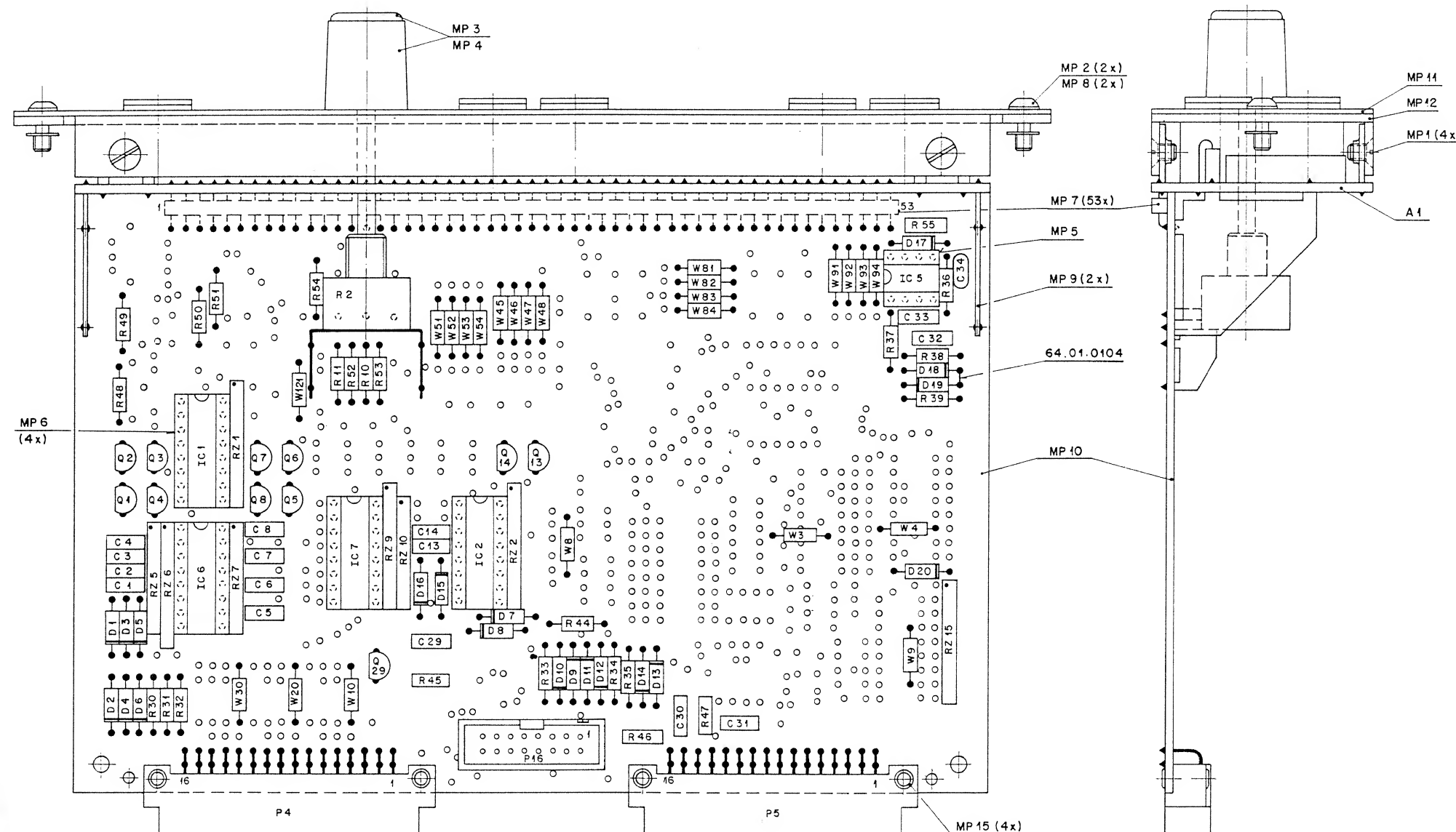




CR Monitor Control Unit 1.990.420.00  
- CR Monitor Switch Board 1.990.429.00



**CR Monitor Control Unit 1.990.420.00**



Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
A.....1	1.990.429.00		CR MONITOR SWITCH BOARD	
C.....1	59.34.4101	100 pF	CE	
C.....2	59.34.4101	100 pF	CE	
C.....3	59.34.4101	100 pF	CE	
C.....4	59.34.4101	100 pF	CE	
C.....5	59.34.4101	100 pF	CE	
C.....6	59.34.4101	100 pF	CE	
C.....7	59.34.4101	100 pF	CE	
C.....8	59.34.4101	100 pF	CE	
C.....13	59.34.4101	100 pF	CE	
C.....14	59.34.4101	100 pF	CE	
C.....29	59.06.0104	100 nF	PE	
C.....30	59.06.0104	100 nF	PE	
C.....31	59.06.0104	100 nF	PE	
C.....32	59.06.0104	100 nF	PE	
C.....33	59.06.0104	100 nF	PE	
C.....34	59.34.7151	150 pF	CE	
D.....1	50.04.0125	1N4448		
D.....2	50.04.0125	1N4448		
D.....3	50.04.0125	1N4448		
D.....4	50.04.0125	1N4448		
D.....5	50.04.0125	1N4448		
D.....6	50.04.0125	1N4448		
D.....7	50.04.0125	1N4448		
D.....8	50.04.0125	1N4448		
D.....9	50.04.0125	1N4448		
D.....10	50.04.0125	1N4448		
D.....11	50.04.0125	1N4448		
D.....12	50.04.0125	1N4448		
D.....13	50.04.0125	1N4448		
D.....14	50.04.0125	1N4448		
D.....15	50.04.0125	1N4448		
D.....16	50.04.0125	1N4448		
D.....17	50.04.0125	1N4448		
D.....18	50.04.0127	BAT 42		
D.....19	50.04.0127	BAT 42		
D.....20	50.04.0125	1N4448		
IC.....1	50.07.1021	CD4021	8-bit static shift register	
IC.....2	50.07.1021	CD4021	8-bit static shift register	
IC.....5	50.09.0119	TL 062	J FET dual op. amp.	
IC.....6	50.07.0018	CD4094	shift and store bus register	
IC.....7	50.07.0018	CD4094	shift and store bus register	
MP.....1	21.01.2352	4 pcs	S-Schr. M3*4	
MP.....2	24.16.3023	2 pcs	Wellensicherung 3mm	
MP.....3	42.01.0233	1 pcs	Knebelknopf D15/4 grau	
MP.....4	42.01.0257	1 pcs	Deckel hellgrau	
MP.....5	53.03.0166	1 pcs	IC-Socket 8-pol	
MP.....6	53.03.0168	4 pcs	IC-Socket 16-pol	
MP.....7	54.11.0125	53 pcs	Stiftenleiste winkel	
MP.....8	1.010.022.21	2 pcs	Linsenschraube IS M3*8	
MP.....9	1.990.100.01	2 pcs	Querprintstuetze	
MP.....10	1.990.420.11	1 pcs	CR-MONITOR PCB	
MP.....11	1.990.420.01	1 pcs	Frontschild CR-MONITOR CONTROL	
MP.....12	1.990.490.02	1 pcs	Traeger Source Selector	
MP.....13	1.990.420.04	1 pcs	Studer-Wr-Etikette 10*20	
MP.....14	43.01.0108	1 pcs	ESE-Schild	
MP.....15	28.99.0119	4 pcs	Rohrniete D2.5*0.15*10	
Q.....1	50.03.0436	BC 237		
Q.....2	50.03.0436	BC 237		
Q.....3	50.03.0436	BC 237		
Q.....4	50.03.0436	BC 237		
Q.....5	50.03.0436	BC 237		
Q.....6	50.03.0436	BC 237		
Q.....7	50.03.0436	BC 237		
Q.....8	50.03.0436	BC 237		
Q.....13	50.03.0436	BC 237		
Q.....14	50.03.0436	BC 237		
Q.....29	50.03.0436	BC 237		
P.....1	0	not used	see MP	
P.....2	54.14.2002	16 pin	PCB ribbon connector	
P.....4	54.11.2013	2*16 pin	eurocard-connector	
P.....5	54.11.2013	2*16 pin	eurocard-connector	
R.....2	1.010.039.58	100 k	Poti 20k lin (only used without balance)	
R.....3	0	not used	used in balance version only (1.010.032-58)	
R.....10	57.11.3104	100 kOhm	1% MF	
R.....11	57.11.3223	22 kOhm	1% MF	
R.....30	57.11.3101	100 Ohm	1% MF	
R.....31	57.11.3101	100 Ohm	1% MF	
R.....32	57.11.3101	100 Ohm	1% MF	
R.....33	57.11.3101	100 Ohm	1% MF	
R.....34	57.11.3101	100 Ohm	1% MF	
R.....35	57.11.3101	100 Ohm	1% MF	
R.....36	57.11.3223	22 kOhm	1% MF	
R.....37	57.11.3223	22 kOhm	1% MF	
R.....38	57.11.3334	330 kOhm	1% MF	
R.....39	57.11.3334	330 kOhm	1% MF	
R.....44	57.11.3101	100 Ohm	1% MF	
R.....45	57.92.1820	82 mA	PTC 42 Ohm	
R.....46	57.92.1820	82 mA	PTC 42 Ohm	
R.....47	57.92.1820	82 mA	PTC 42 Ohm	
R.....48	0	not used	used in balance version only (57113134)	



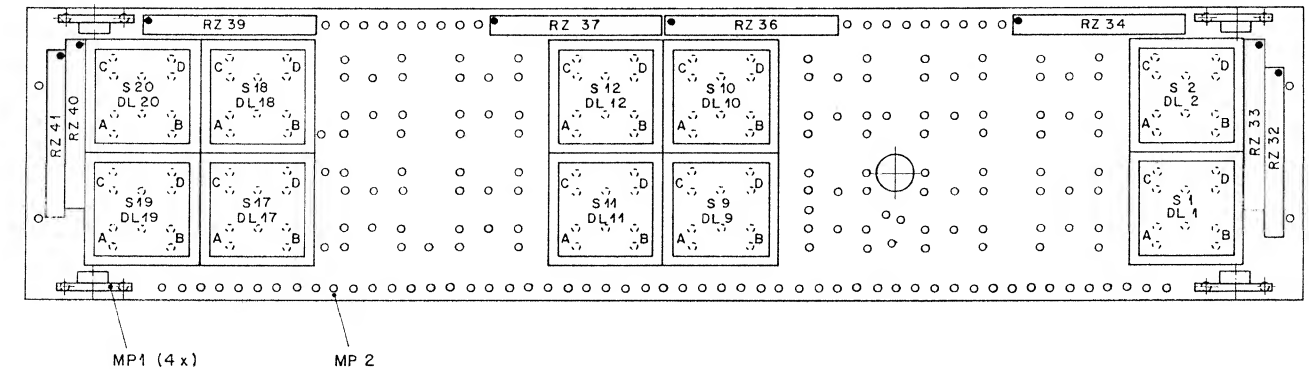
**CR Monitor Control Unit 1.990.420.00**

Ad	..POS.	..REF.No.	DESCRIPTION	MANUFACTURER
R....49	.	0	not used	used in balance version only (57113134)
R....50	.	0	not used	used in balance version only (57113362)
R....51	.	0	not used	used in balance version only (57113473)
R....52	57.11.3104	100 kOhm	1% MF	
R....53	.	0	not used	used in balance version only (57113363)
R....54	.	0	not used	used in balance version only (57113363)
R....55	57.92.7016	1.6 A	R-PTC 0.22 Ohm	
W....3	57.11.3000	0 Ohm	wire bridge	RXTM to IC 2
W....4	57.11.3000	0 Ohm	wire bridge	RXTM to W 3
W....8	57.11.3000	0 Ohm	wire bridge	TXD to IC 7
W....9	57.11.3000	0 Ohm	wire bridge	TXD to W 8
W....10	57.11.3000	0 Ohm	wire bridge	SERDAT #0 (INT 0)
W....11	.	0	not used	wire bridge SERDAT #1 INT 1 57113000
W....12	.	0	not used	wire bridge SERDAT #2 INT 2 57113000
W....13	.	0	not used	wire bridge SERDAT #3 INT 3 57113000
W....14	.	0	not used	wire bridge SERDAT #4 INT 4 57113000
W....15	.	0	not used	wire bridge SERDAT #5 INT 5 57113000
W....16	.	0	not used	wire bridge SERDAT #6 INT 6 57113000
W....20	57.11.3000	0 Ohm	wire bridge	SERDAT #0 (TSTB 0)
W....21	.	0	not used	wire bridge SERDAT #1 TSTB 1 57113000
W....22	.	0	not used	wire bridge SERDAT #2 TSTB 2 57113000
W....23	.	0	not used	wire bridge SERDAT #3 TSTB 3 57113000
W....24	.	0	not used	wire bridge SERDAT #4 TSTB 4 57113000
W....25	.	0	not used	wire bridge SERDAT #5 TSTB 5 57113000
W....26	.	0	not used	wire bridge SERDAT #6 TSTB 6 57113000
W....30	57.11.3000	0 Ohm	wire bridge	SERDAT #0 (RXD 0)
W....31	.	0	not used	wire bridge SERDAT #1 RXD 1 57113000
W....32	.	0	not used	wire bridge SERDAT #2 RXD 2 57113000
W....33	.	0	not used	wire bridge SERDAT #3 RXD 3 57113000
W....34	.	0	not used	wire bridge SERDAT #4 RXD 4 57113000
W....35	.	0	not used	wire bridge SERDAT #5 RXD 5 57113000
W....36	.	0	not used	wire bridge SERDAT #6 RXD 6 57113000
W....45	57.11.3000	0 Ohm	wire bridge	
W....46	57.11.3000	0 Ohm	wire bridge	
W....47	57.11.3000	0 Ohm	wire bridge	
W....48	57.11.3000	0 Ohm	wire bridge	
W....51	57.11.3000	0 Ohm	wire bridge	
W....52	57.11.3000	0 Ohm	wire bridge	
W....53	57.11.3000	0 Ohm	wire bridge	
W....54	57.11.3000	0 Ohm	wire bridge	
W....81	57.11.3000	0 Ohm	wire bridge	
W....82	57.11.3000	0 Ohm	wire bridge	
W....83	57.11.3000	0 Ohm	wire bridge	
W....84	57.11.3000	0 Ohm	wire bridge	
W....91	57.11.3000	0 Ohm	wire bridge	
W....92	57.11.3000	0 Ohm	wire bridge	
W....93	57.11.3000	0 Ohm	wire bridge	
W....94	57.11.3000	0 Ohm	wire bridge	
W....120	.	0	not used	used only for CR LEVEL -100d8...+0d8
W....121	57.11.3000	0 Ohm	wire bridge	CR LEVEL -100d8...+10d8
W....124	.	0	not used	only used for CR LEVEL -100d8...+40d8
RZ....1	57.88.4104	100 kOhm	2%	resistor-network
RZ....2	57.88.4104	100 kOhm	2%	resistor-network
RZ....5	57.88.2682	6.8 kOhm	2%	resistor-network
RZ....6	57.88.4104	100 kOhm	2%	resistor-network
RZ....7	57.88.2682	6.8 kOhm	2%	resistor-network
RZ....9	57.88.4104	100 kOhm	2%	resistor-network
RZ....10	57.88.2682	6.8 kOhm	2%	resistor-network
RZ....15	57.88.4104	100 kOhm	2%	resistor-network

CE=Ceramic, PE=Polyester  
MF=Metal Film

1.990.420.00	CR MONITOR CONTROL UNIT	SCA90/12/0500
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**CR Monitor Switch Board 1.990.429.00**



Ankerung					④
					②
					①
Ausgabe	6.3.90	W 40	SCA	W	③
	Datum	Gez.	Gew.	Ges.	Index

Kopie für:

STUDER REGENSDORF ZÜRICH	Benennung: CR MONITOR SWITCH BOARD	Nummer: 1.990.429-00
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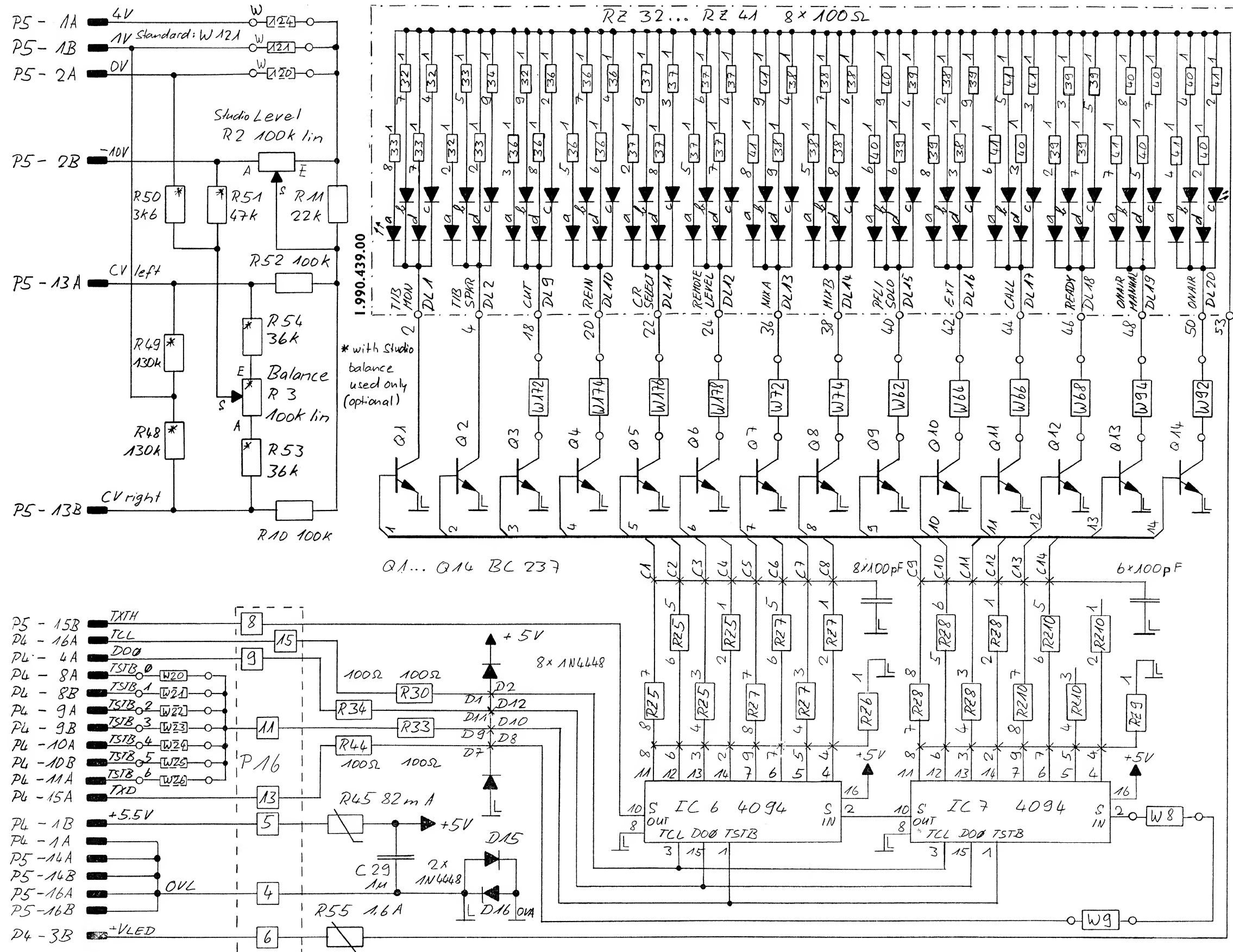
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DL...	1	0	not used	see S 01
DL...	2	0	not used	see S 02
DL...	9	0	not used	see S 09
DL...	10	0	not used	see S 10
DL...	11	0	not used	see S 11
DL...	12	0	not used	see S 12
DL...	17	0	not used	see S 17
DL...	18	0	not used	see S 18
DL...	19	0	not used	see S 19
DL...	20	0	not used	see S 20
MP...	1	1.990.100.05	4 pcs	Querprinthalter
MP...	2	1.990.429.11	1 pcs	CR MONITOR SWITCH PCB
MP...	3	1.990.429.04	1 pcs	Nr-Etikette
S...	1	55.15.0702	Taste 1*A, 12mm	RT/Trans CH I CUT
S...	2	55.15.0702	Taste 1*A, 12mm	RT/Trans CH II CUT
S...	9	55.15.0722	Taste 1*A, 12mm	RT/RT DIM - 20dB
S...	10	55.15.0705	Taste 1*A, 12mm	GN/Trans MONO
S...	11	55.15.0705	Taste 1*A, 12mm	GN/Trans Kanalvert.
S...	12	55.15.0705	Taste 1*A, 12mm	GN/Trans CH I Phase
S...	17	55.15.0704	Taste 1*A, 12mm	GB/Trans speaker ALT.
S...	18	55.15.0704	Taste 1*A, 12mm	GB/Trans speaker MINI
S...	19	55.15.0704	Taste 1*A, 12mm	GB/Trans speaker I
S...	20	55.15.0704	Taste 1*A, 12mm	GB/Trans speaker II
RZ...	32	57.88.4101	100 Ohm	2% ,8*
RZ...	33	57.88.4101	100 Ohm	2% ,8*
RZ...	34	57.88.4101	100 Ohm	2% ,8*
RZ...	36	57.88.4101	100 Ohm	2% ,8*
RZ...	37	57.88.4101	100 Ohm	2% ,8*
RZ...	39	57.88.4101	100 Ohm	2% ,8*
RZ...	40	57.88.4101	100 Ohm	2% ,8*
RZ...	41	57.88.4101	100 Ohm	2% ,8*

CER=Ceramic, PE=Polyester  
MF=Metal Film, PMG=Cermet

MANUFACTURER: Ex=Exar, NEC=Nippon Electric Corp., Ph=Philips, Ra=Raytheon,  
Sig=Signetics, St=Studer.

1.990.429.00	CR MONITOR SWITCH BOARD	SCA88/12/1600
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Studio Monitor Control Unit 1.990.430.00  
- Studio Monitor Switch Board 1.990.439.00

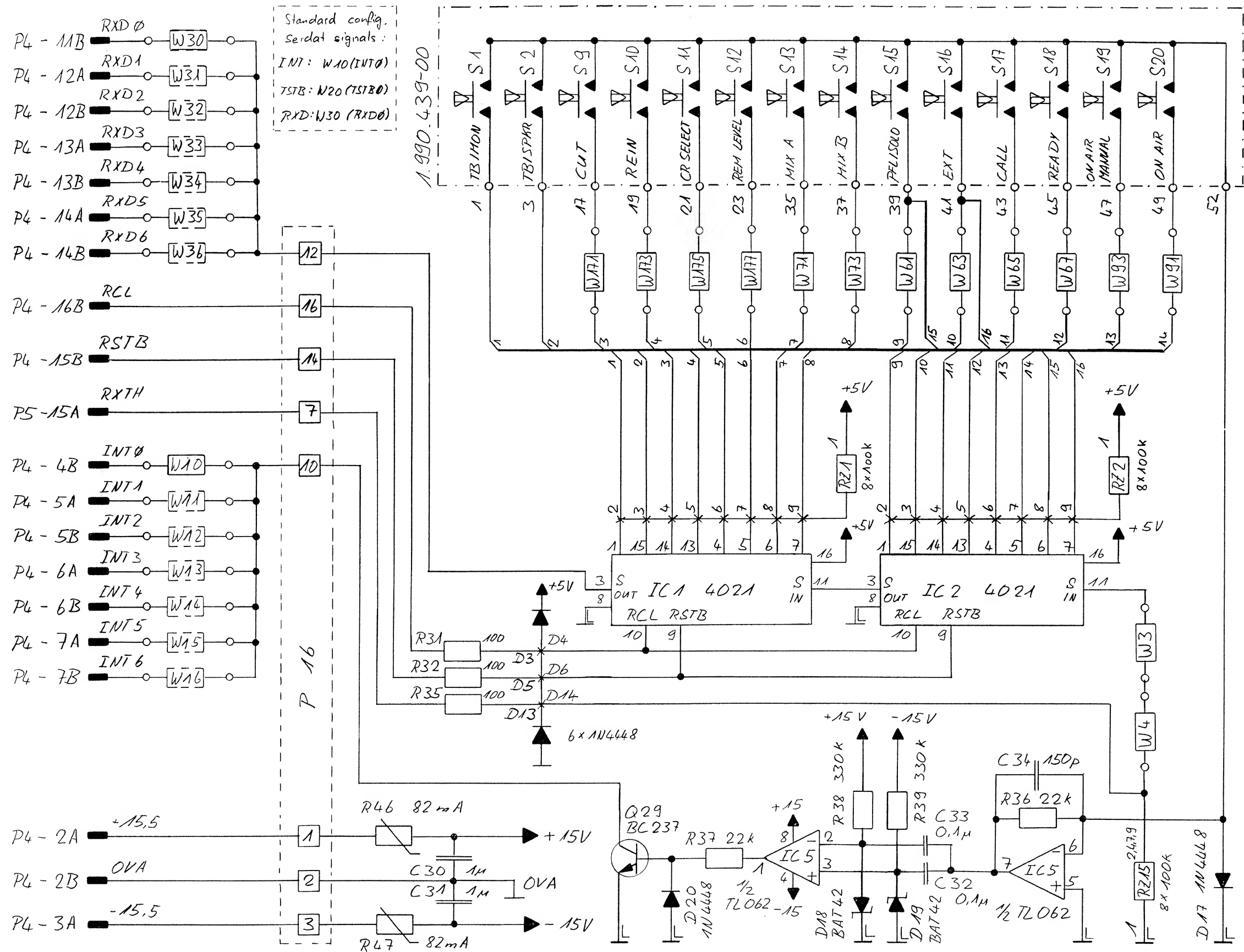


8.5.90 ASchmid	INCL. SWITCH BOARD 1.990.439.00	PAGE 1 OF 2
STUDER	STUDIO MONITOR CONTROL UNIT	SC 1.990.430.00





Studio Monitor Control Unit 1.990.430.00  
- Studio Monitor Switch Board 1.990.439.00



8.590 A Schmid	...	...	PAGE 2 OF 2
INCL. SWITCH BOARD 1.990.439.00	...	...	
STUDIO MONITOR CONTROL UNIT	SC	1.990.430.00	
STUDER			

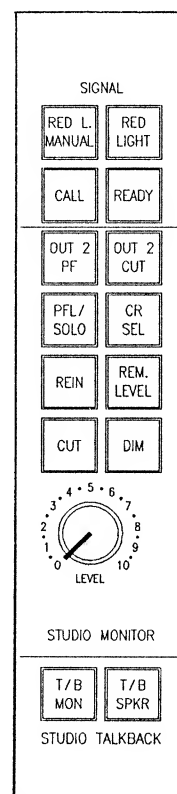
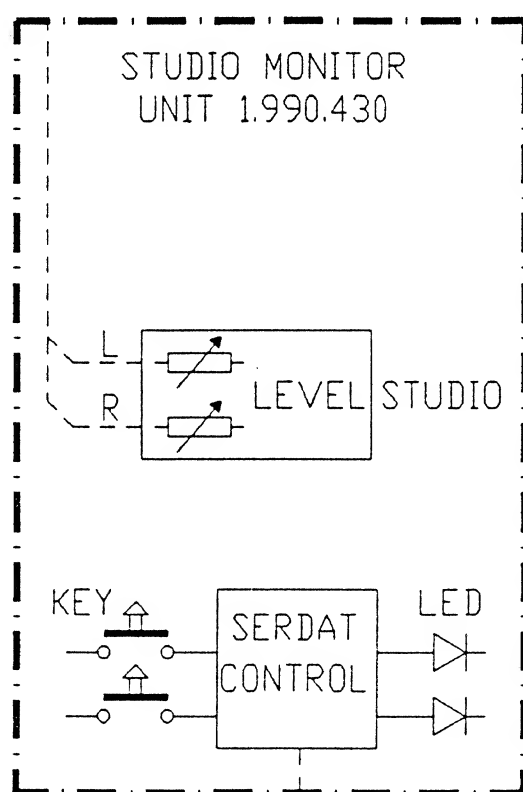


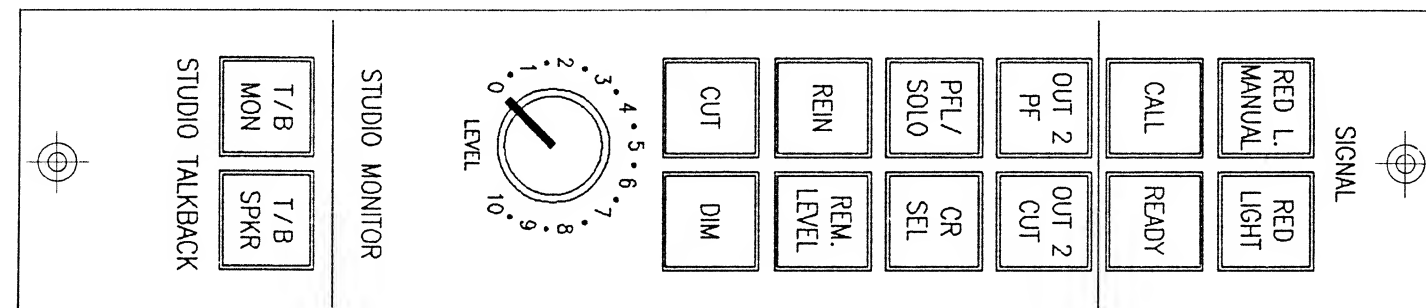
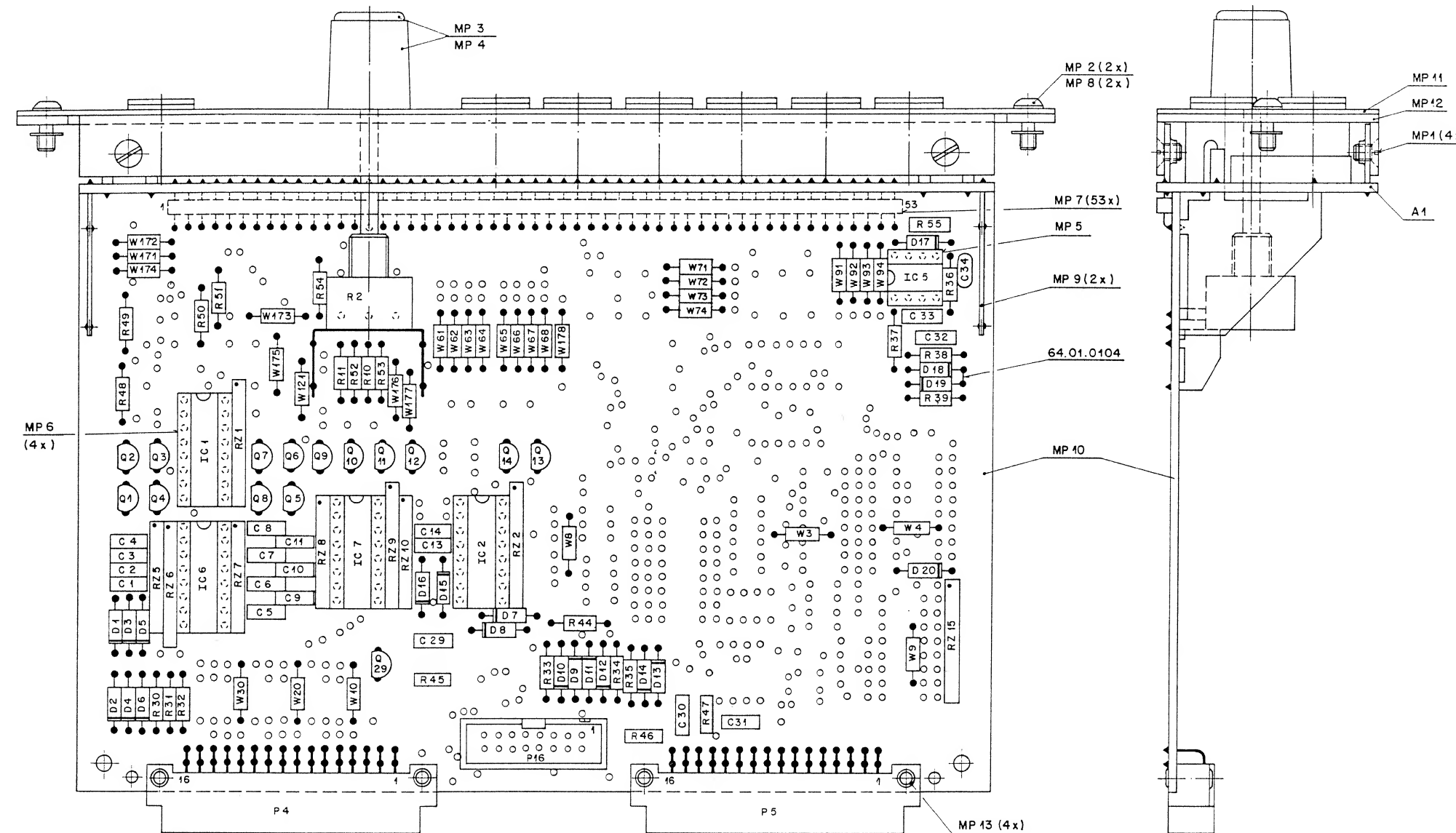
## Pin Location List

CR Monitor Control Unit 1.990.420.00

P	NO	NAME	REMARK	B=BUS O=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC	
-----			-----		-----
P4	01A	0V-L	GROUND SIGN (LOGIC)	B	
P4	01B	+ 5.5V	+ SUPPLY	B	
P4	02A	+ 15.5V	+ SUPPLY	B	
P4	02B	0V-A	GROUND AUDIO	B	
P4	03A	- 15.5V	- SUPPLY	B	
P4	03B	+3...4V LED	LED SUPPLY VARIABLE +3...4V	B	
P4	04A	DO 0	DATA OUT 0 (ENABLE)		
P4	04B	INT 0	INTERUPT 0		
P4	05A	INT 1	INTERUPT 1		
P4	05B	INT 2	INTERUPT 2		
P4	06A	INT 3	INTERUPT 3		
P4	06B	INT 4	INTERUPT 4		
P4	07A	INT 5	INTERUPT 5		
P4	07B	INT 6	INTERUPT 6		
P4	08A	TSTB 0	TRANSMIT STROBE 0		
P4	08B	TSTB 1	TRANSMIT STROBE 1		
P4	09A	TSTB 2	TRANSMIT STROBE 2		
P4	09B	TSTB 3	TRANSMIT STROBE 3		
P4	10A	TSTB 4	TRANSMIT STROBE 4		
P4	10B	TSTB 5	TRANSMIT STROBE 5		
P4	11A	TSTB 6	TRANSMIT STROBE 6		
P4	11B	RXD 0	RECEIVE DATA 0		
P4	12A	RXD 1	RECEIVE DATA 1		
P4	12B	RXD 2	RECEIVE DATA 2		
P4	13A	RXD 3	RECEIVE DATA 3		
P4	13B	RXD 4	RECEIVE DATA 4		
P4	14A	RXD 5	RECEIVE DATA 5		
P4	14B	RXD 6	RECEIVE DATA 6		
P4	15A	TXD	TRANSMIT DATA		
P4	15B	RSTB	RECEIVE STROBE		
P4	16A	TCL	TRANSMIT CLOCK		
P4	16B	RCL	RECEIVE CLOCK		
P5	01A	+4V	CONTROL VOLTAGE VCA		
P5	01B	+1V	CONTROL VOLTAGE VCA		
P5	02A	0V	CONTROL VOLTAGE VCA		
P5	02B	-10V	CONTROL VOLTAGE VCA		
P5	03A	-	N.C.		
P5	03B	-	N.C.		
P5	04A	-	N.C.		
P5	04B	-	N.C.		
P5	05A	-	N.C.		
P5	05B	-	N.C.		
P5	06A	-	N.C.		
P5	06B	-	N.C.		
P5	07A	-	N.C.		
P5	07B	-	N.C.		
P5	08A	-	N.C.		
P5	08B	-	N.C.		
P5	09A	-	N.C.		
P5	09B	-	N.C.		
P5	10A	-	N.C.		
P5	10B	-	N.C.		
P5	11A	-	N.C.		
P5	11B	-	N.C.		
P5	12A	-	N.C.		
P5	12B	-	N.C.		
P5	13A	CV-CR-L	CTRL.VOLTAGE CR LEVEL LEFT		
P5	13B	CV-CR-R	CTRL.VOLTAGE CR LEVEL RIGHT		
P5	14	0V-L	GROUND SIGN (LOGIC)	B	X X
P5	15A	RXTH	RECEIVE DATA THROUGH		
P5	15B	TXTH	TRANSMIT DATA THROUGH		
P5	16	0V-L	GROUND SIGN (LOGIC)	B	X X

## Studio Monitor Control Unit 1.990.430.00



**Studio Monitor Control Unit 1.990.430.00**

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
A.....1	1.990.439.00		STUDIO MONITOR SWITCH BOARD	
C.....1	59.34.4101	100 pF	CE	
C.....2	59.34.4101	100 pF	CE	
C.....3	59.34.4101	100 pF	CE	
C.....4	59.34.4101	100 pF	CE	
C.....5	59.34.4101	100 pF	CE	
C.....6	59.34.4101	100 pF	CE	
C.....7	59.34.4101	100 pF	CE	
C.....8	59.34.4101	100 pF	CE	
C.....9	59.34.4101	100 pF	CE	
C.....10	59.34.4101	100 pF	CE	
C.....11	59.34.4101	100 pF	CE	
C.....12	59.34.4101	100 pF	CE	
C.....13	59.34.4101	100 pF	CE	
C.....14	59.34.4101	100 pF	CE	
C.....29	59.06.0104	100 nF	PE	
C.....30	59.06.0104	100 nF	PE	
C.....31	59.06.0104	100 nF	PE	
C.....32	59.06.0104	100 nF	PE	
C.....33	59.06.0104	100 nF	PE	
C.....34	59.34.7151	150 pF	CE	
D.....1	50.04.0125	1N4448		
D.....2	50.04.0125	1N4448		
D.....3	50.04.0125	1N4448		
D.....4	50.04.0125	1N4448		
D.....5	50.04.0125	1N4448		
D.....6	50.04.0125	1N4448		
D.....7	50.04.0125	1N4448		
D.....8	50.04.0125	1N4448		
D.....9	50.04.0125	1N4448		
D.....10	50.04.0125	1N4448		
D.....11	50.04.0125	1N4448		
D.....12	50.04.0125	1N4448		
D.....13	50.04.0125	1N4448		
D.....14	50.04.0125	1N4448		
D.....15	50.04.0125	1N4448		
D.....16	50.04.0125	1N4448		
D.....17	50.04.0125	1N4448		
D.....18	50.04.0127	BAT 42		
D.....19	50.04.0127	BAT 42		
D.....20	50.04.0125	1N4448		
IC.....1	50.07.1021	CD4021	8-bit static shift register	
IC.....2	50.07.1021	CD4021	8-bit static shift register	
IC.....5	50.09.0119	TL 062	J FET dual op. amp.	
IC.....6	50.07.0018	CD4094	shift and store bus register	
IC.....7	50.07.0018	CD4094	shift and store bus register	
MP.....1	21.01.2352	4 pcs	S-Schr. M3*4	
MP.....2	24.16.3023	2 pcs	Wellensicherung 3mm	
MP.....3	42.01.0233	1 pcs	Knobelknopf D15/4 grau	
MP.....4	42.01.0257	1 pcs	Deckel hellgrau	
MP.....5	53.03.0166	1 pcs	IC-Socket 8-pol	
MP.....6	53.03.0168	4 pcs	IC-Socket 16-pol	
MP.....7	54.11.0125	53 pcs	Stiftenleiste winkel	
MP.....8	1.010.022.21	2 pcs	Leinschraube IS M3*8	
MP.....9	1.990.100.01	2 pcs	Querprintstuetze	
MP.....10	1.990.420.11	1 pcs	CR-MONITOR PCB	
MP.....11	1.990.430.01	1 pcs	Frontschild STUDIO MONITOR CONTROL	
MP.....12	1.990.430.02	1 pcs	Traeger Source Selector	
MP.....13	28.99.0119	4 pcs	Rohrniete D 2.5*0.15*10	
MP.....14	43.01.0108	1 pcs	ESE-Schild	
MP.....15	1.990.430.04	1 pcs	Studer-Mr-Etikette 10*20	
Q.....1	50.03.0436	BC 237		
Q.....2	50.03.0436	BC 237		
Q.....3	50.03.0436	BC 237		
Q.....4	50.03.0436	BC 237		
Q.....5	50.03.0436	BC 237		
Q.....6	50.03.0436	BC 237		
Q.....7	50.03.0436	BC 237		
Q.....8	50.03.0436	BC 237		
Q.....9	50.03.0436	BC 237		
Q.....10	50.03.0436	BC 237		
Q.....11	50.03.0436	BC 237		
Q.....12	50.03.0436	BC 237		



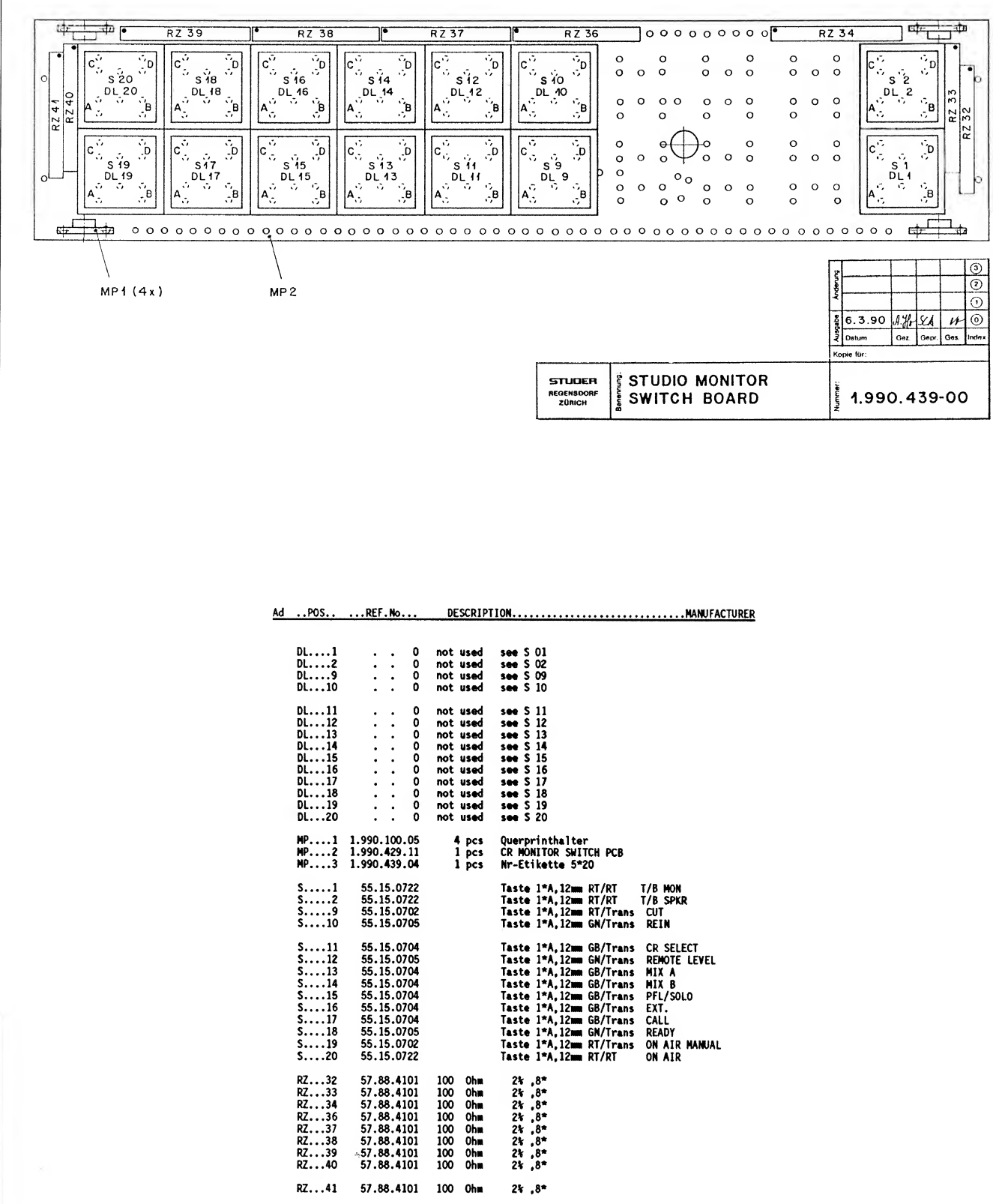
Studio Monitor Control Unit 1.990.430.00

Ad	..POS..	..REF.No..	DESCRIPTION.....	MANUFACTURER
R....38	57.11.3334	330 kOhm	1% MF	
R....39	57.11.3334	330 kOhm	1% MF	
R....44	57.11.3101	100 Ohm	1% MF	
R....45	57.92.1820	82 mA	PTC 42 Ohm	
R....46	57.92.1820	82 mA	PTC 42 Ohm	
R....47	57.92.1820	82 mA	PTC 42 Ohm	
R....48	.	0	not used	used in balance version only (57113134)
R....49	.	0	not used	used in balance version only (57113134)
R....50	.	0	not used	used in balance version only (57113362)
R....51	.	0	not used	used in balance version only (57113473)
R....52	57.11.3104	100 kOhm	1% MF	
R....53	.	0	not used	used in balance version only (57113363)
R....54	.	0	not used	used in balance version only (57113363)
R....55	57.92.7016	1.6 A	R-PTC 0.22 Ohm	
W....3	57.11.3000	0 Ohm	wire bridge RXTH to IC 2	
W....4	57.11.3000	0 Ohm	wire bridge RXTH to W 3	
W....8	57.11.3000	0 Ohm	wire bridge TXD to IC 7	
W....9	57.11.3000	0 Ohm	wire bridge TXD to W 8	
W....10	57.11.3000	0 Ohm	wire bridge SERDAT #0 (INT 0)	
W....11	.	0	not used	wire bridge SERDAT #1 INT 1 57113000
W....12	.	0	not used	wire bridge SERDAT #2 INT 2 57113000
W....13	.	0	not used	wire bridge SERDAT #3 INT 3 57113000
W....14	.	0	not used	wire bridge SERDAT #4 INT 4 57113000
W....15	.	0	not used	wire bridge SERDAT #5 INT 5 57113000
W....16	.	0	not used	wire bridge SERDAT #6 INT 6 57113000
W....20	57.11.3000	0 Ohm	wire bridge SERDAT #0 (TSTB 0)	
W....21	.	0	not used	wire bridge SERDAT #1 TSTB 1 57113000
W....22	.	0	not used	wire bridge SERDAT #2 TSTB 2 57113000
W....23	.	0	not used	wire bridge SERDAT #3 TSTB 3 57113000
W....24	.	0	not used	wire bridge SERDAT #4 TSTB 4 57113000
W....25	.	0	not used	wire bridge SERDAT #5 TSTB 5 57113000
W....26	.	0	not used	wire bridge SERDAT #6 TSTB 6 57113000
W....30	57.11.3000	0 Ohm	wire bridge SERDAT #0 (RXD 0)	
W....31	.	0	not used	wire bridge SERDAT #1 RXD 1 57113000
W....32	.	0	not used	wire bridge SERDAT #2 RXD 2 57113000
W....33	.	0	not used	wire bridge SERDAT #3 RXD 3 57113000
W....34	.	0	not used	wire bridge SERDAT #4 RXD 4 57113000
W....35	.	0	not used	wire bridge SERDAT #5 RXD 5 57113000
W....36	.	0	not used	wire bridge SERDAT #6 RXD 6 57113000
W....61	57.11.3000	0 Ohm	wire bridge	
W....62	57.11.3000	0 Ohm	wire bridge	
W....63	57.11.3000	0 Ohm	wire bridge	
W....64	57.11.3000	0 Ohm	wire bridge	
W....65	57.11.3000	0 Ohm	wire bridge	
W....66	57.11.3000	0 Ohm	wire bridge	
W....67	57.11.3000	0 Ohm	wire bridge	
W....68	57.11.3000	0 Ohm	wire bridge	
W....71	57.11.3000	0 Ohm	wire bridge	
W....72	57.11.3000	0 Ohm	wire bridge	
W....73	57.11.3000	0 Ohm	wire bridge	
W....74	57.11.3000	0 Ohm	wire bridge	
W....91	57.11.3000	0 Ohm	wire bridge	
W....92	57.11.3000	0 Ohm	wire bridge	
W....93	57.11.3000	0 Ohm	wire bridge	
W....94	57.11.3000	0 Ohm	wire bridge	
W....171	57.11.3000	0 Ohm	wire bridge	
W....172	57.11.3000	0 Ohm	wire bridge	
W....173	57.11.3000	0 Ohm	wire bridge	
W....174	57.11.3000	0 Ohm	wire bridge	
W....175	57.11.3000	0 Ohm	wire bridge	
W....176	57.11.3000	0 Ohm	wire bridge	
W....177	57.11.3000	0 Ohm	wire bridge	
W....178	57.11.3000	0 Ohm	wire bridge	
W....120	.	0	not used	used only for CR LEVEL -100dB...+0dB
W....121	57.11.3000	0 Ohm	wire bridge CR LEVEL -100dB...+10dB	
W....124	.	0	not used	only used for CR LEVEL -100dB...+40dB
RZ....1	57.88.4104	100 kOhm	2% resistor-network	
RZ....2	57.88.4104	100 kOhm	2% resistor-network	
RZ....5	57.88.2682	6.8 kOhm	2% resistor-network	
RZ....6	57.88.4104	100 kOhm	2% resistor-network	
RZ....7	57.88.2682	6.8 kOhm	2% resistor-network	
RZ....8	57.88.2682	6.8 kOhm	2% resistor-network	
RZ....9	57.88.4104	100 kOhm	2% resistor-network	
RZ....10	57.88.2682	6.8 kOhm	2% resistor-network	
RZ....15	57.88.4104	100 kOhm	2% resistor-network	

CE=Ceramic, PE=Polyester  
MF=Metal Film

1.990.430.00 STUDIO MONITOR CONTROL UNIT SCA90/12/0500

Studio Monitor Switch Board 1.990.439.00



CER=Ceramic, PE=Polyester  
MF=Metal Film, PMG=Cermet

MANUFACTURER: Ex=Exar, NEC=Nippon Electric Corp., Ph=Philips, Sig=Signetics, St=Studer.

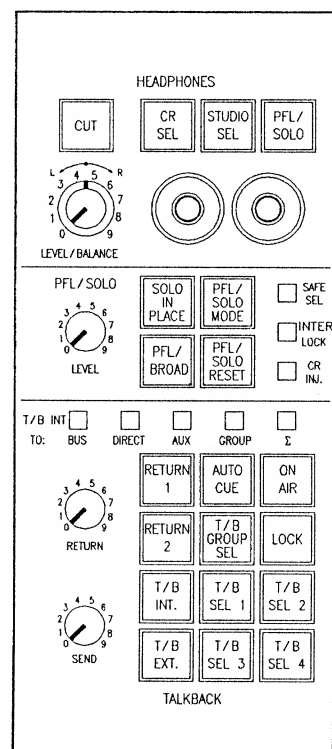
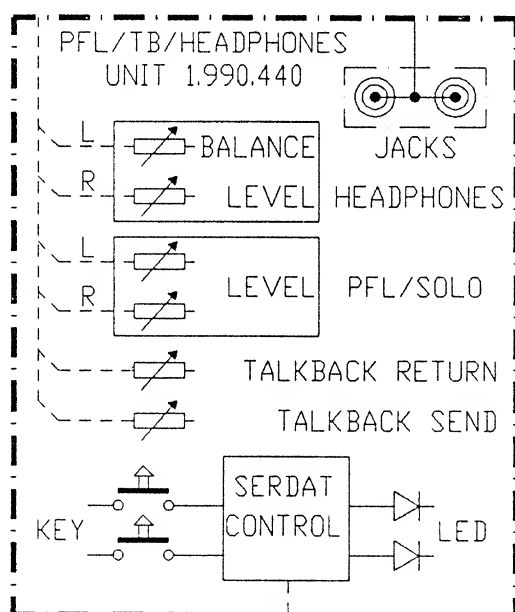
1.990.439.00 STUDIO MONITOR SWITCH BOARD SCA89/07/0500

## Pin Location List

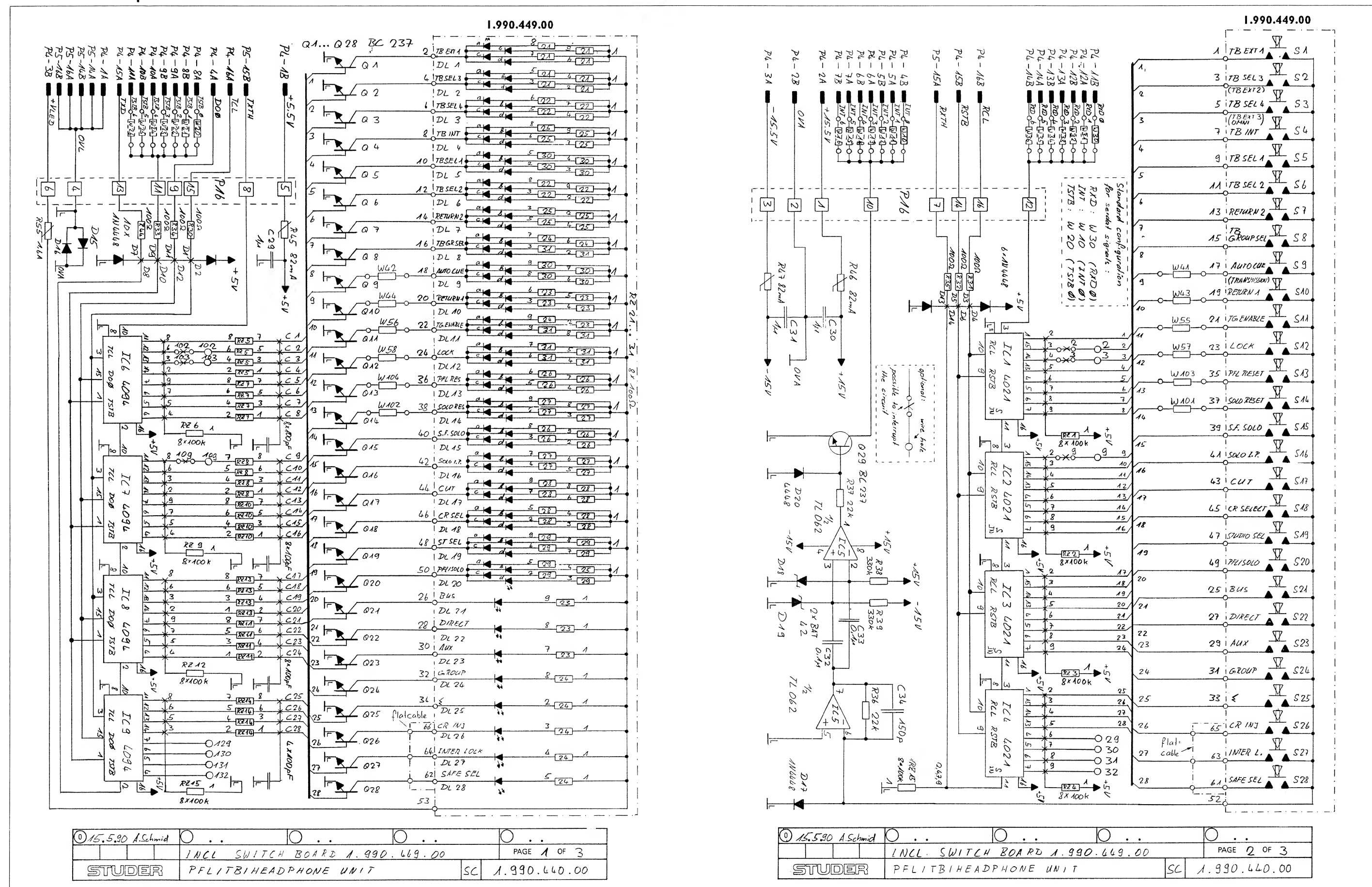
## Studio Monitor Control Unit 1.990.430.00

P	NO	NAME	REMARK	B=BUS O=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC
-----			-----	-----
P4	01A	0V-L	GROUND SIGN (LOGIC)	B
P4	01B	+ 5.5V	+ SUPPLY	B
P4	02A	+ 15.5V	+ SUPPLY	B
P4	02B	0V-A	GROUND AUDIO	B
P4	03A	- 15.5V	- SUPPLY	B
P4	03B	+3...4V LED	LED SUPPLY VARIABLE +3...4V	B
P4	04A	DO 0	DATA OUT.0 (ENABLE)	
P4	04B	INT 0	INTERUPT 0	
P4	05A	INT 1	INTERUPT 1	
P4	05B	INT 2	INTERUPT 2	
P4	06A	INT 3	INTERUPT 3	
P4	06B	INT 4	INTERUPT 4	
P4	07A	INT 5	INTERUPT 5	
P4	07B	INT 6	INTERUPT 6	
P4	08A	TSTB 0	TRANSMIT STROBE 0	
P4	08B	TSTB 1	TRANSMIT STROBE 1	
P4	09A	TSTB 2	TRANSMIT STROBE 2	
P4	09B	TSTB 3	TRANSMIT STROBE 3	
P4	10A	TSTB 4	TRANSMIT STROBE 4	
P4	10B	TSTB 5	TRANSMIT STROBE 5	
P4	11A	TSTB 6	TRANSMIT STROBE 6	
P4	11B	RXD 0	RECEIVE DATA 0	
P4	12A	RXD 1	RECEIVE DATA 1	
P4	12B	RXD 2	RECEIVE DATA 2	
P4	13A	RXD 3	RECEIVE DATA 3	
P4	13B	RXD 4	RECEIVE DATA 4	
P4	14A	RXD 5	RECEIVE DATA 5	
P4	14B	RXD 6	RECEIVE DATA 6	
P4	15A	TXD	TRANSMIT DATA	
P4	15B	RSTB	RECEIVE STROBE	
P4	16A	TCL	TRANSMIT CLOCK	
P4	16B	RCL	RECEIVE CLOCK	
P5	01A	+4V	CONTROL VOLTAGE VCA	
P5	01B	+1V	CONTROL VOLTAGE VCA	
P5	02A	0V	CONTROL VOLTAGE VCA	
P5	02B	-10V	CONTROL VOLTAGE VCA	
P5	03A	-	N.C.	
P5	03B	-	N.C.	
P5	04A	-	N.C.	
P5	04B	-	N.C.	
P5	05A	-	N.C.	
P5	05B	-	N.C.	
P5	06A	-	N.C.	
P5	06B	-	N.C.	
P5	07A	-	N.C.	
P5	07B	-	N.C.	
P5	08A	-	N.C.	
P5	08B	-	N.C.	
P5	09A	-	N.C.	
P5	09B	-	N.C.	
P5	10A	-	N.C.	
P5	10B	-	N.C.	
P5	11A	-	N.C.	
P5	11B	-	N.C.	
P5	12A	-	N.C.	
P5	12B	-	N.C.	
P5	13A	CV-STUDIO-L	CTRL.VOLT.STUDIO LEVEL LEFT	
P5	13B	CV-STUDIO-R	CTRL.VOLT.STUDIO LEVEL RIGHT	
P5	14	0V-L	GROUND SIGN (LOGIC)	B X X
P5	15A	RXTH	RECEIVE DATA THROUGH	
P5	15B	TXTH	TRANSMIT DATA THROUGH	
P5	16	0V-L	GROUND SIGN (LOGIC)	B X X

## PFL / Talk Back / Headphone Unit 1.990.440.00

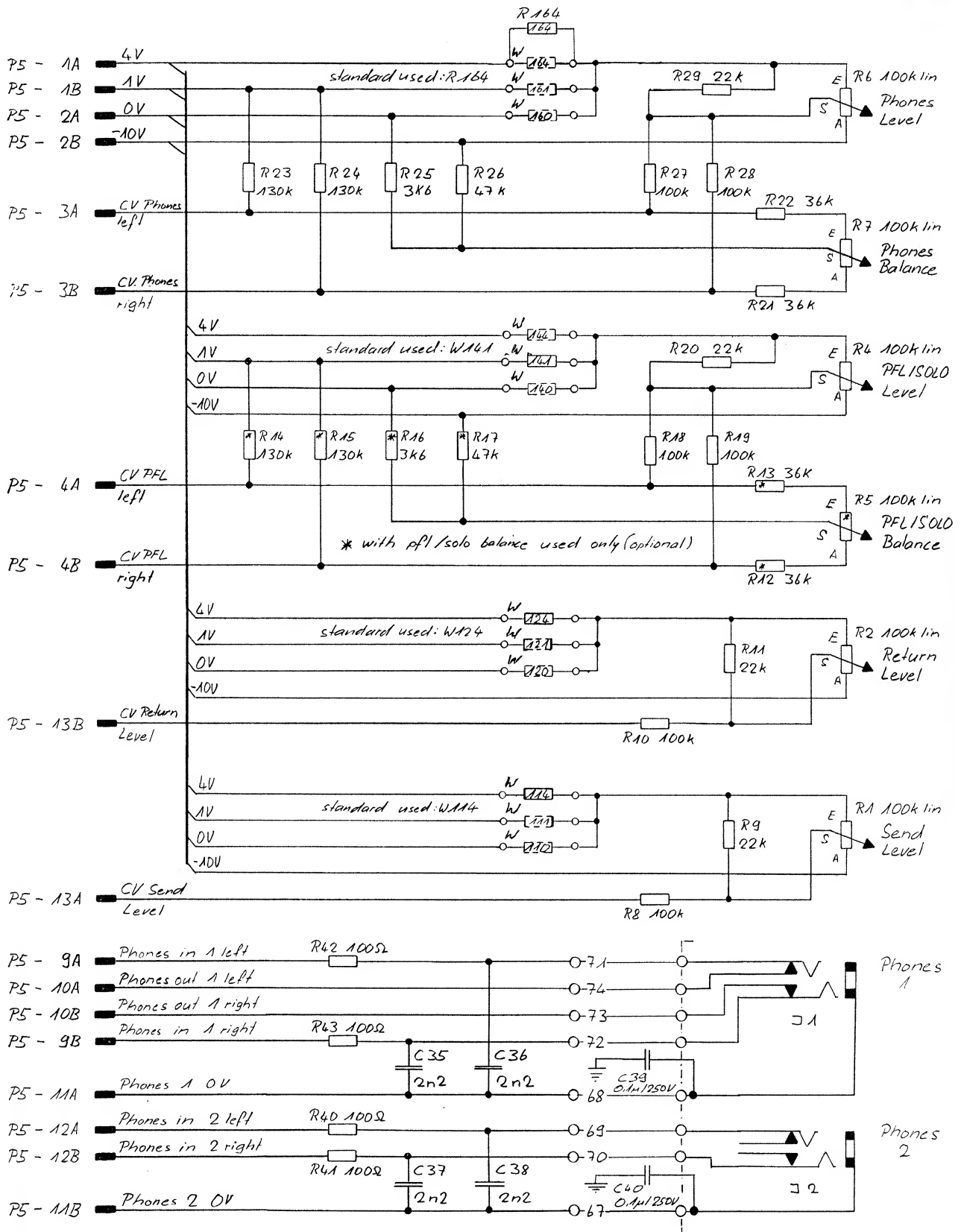


PFL / Talk Back / Headphone Unit I.990.440.00  
- PFL / TB / Headphone Switch Board I.990.449.00



## PFL / Talk Back / Headphone Unit 1.990.440.00

- PFL / TB / Headphone Switch Board 1.990.449.00

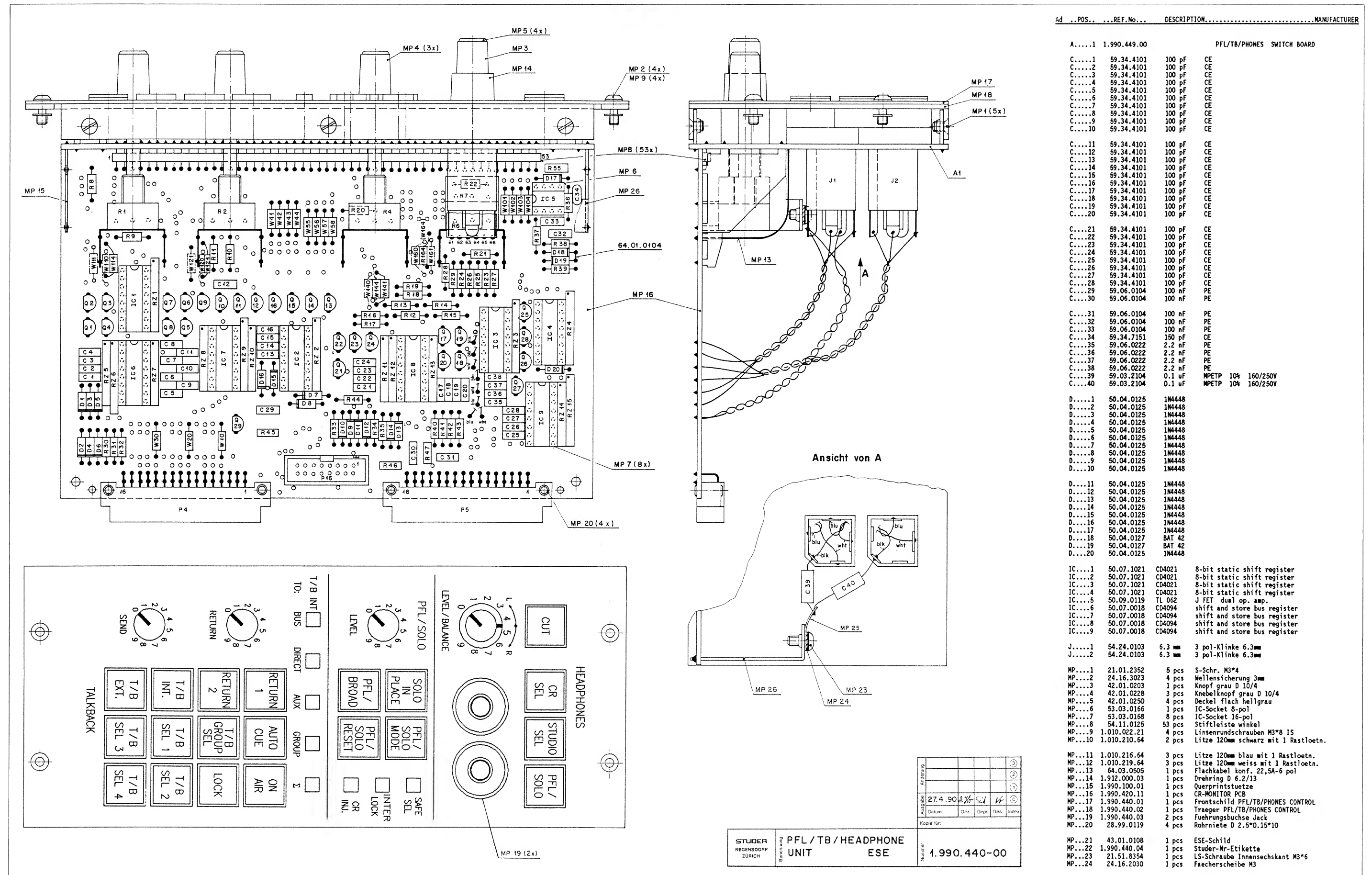


① 19.490 A.Schmid	② 12.1280 A.Schmid	③ ..	④ ..	⑤ ..
PAGE 3 OF 3				
STUDER		PFL/TB/HEADPHONE UNIT		SC 1.990.440.00





**PFL / Talk Back / Headphone Unit 1.990.440.00**





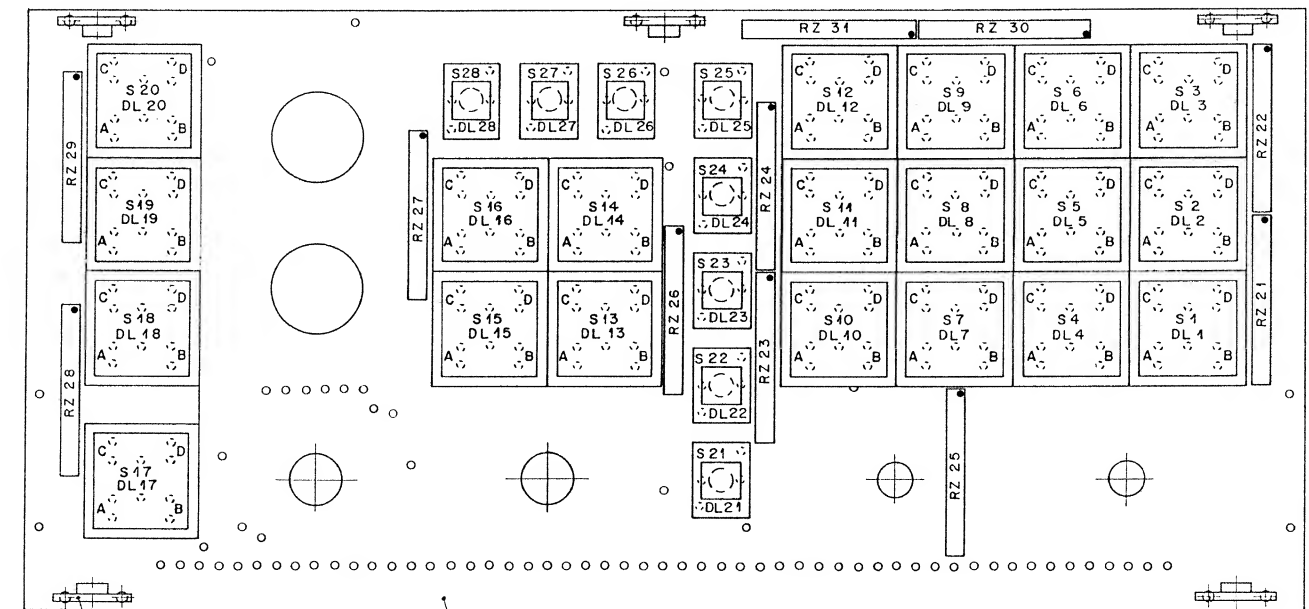
## PFL / Talk Back / Headphone Unit 1.990.440.00

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER	Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
MP...	25	29.26.1022	1 pcs	Loetse M3	W....	24	0	not used	wire bridge SERDAT #4 TSTB 4 57113000
MP...	26	1.990.100.03	1 pcs	Querprintstuetze rechts	W....	25	0	not used	wire bridge SERDAT #5 TSTB 5 57113000
Q....	1	50.03.0436	BC 237		W....	26	0	not used	wire bridge SERDAT #6 TSTB 6 57113000
Q....	2	50.03.0436	BC 237		W....	30	57.11.3000	0 Ohm	wire bridge SERDAT #0 (RXD 0)
Q....	3	50.03.0436	BC 237		W....	31	0	not used	wire bridge SERDAT #1 RXD 1 57113000
Q....	4	50.03.0436	BC 237		W....	32	0	not used	wire bridge SERDAT #2 RXD 2 57113000
Q....	5	50.03.0436	BC 237		W....	33	0	not used	wire bridge SERDAT #3 RXD 3 57113000
Q....	6	50.03.0436	BC 237		W....	34	0	not used	wire bridge SERDAT #4 RXD 4 57113000
Q....	7	50.03.0436	BC 237		W....	35	0	not used	wire bridge SERDAT #5 RXD 5 57113000
Q....	8	50.03.0436	BC 237		W....	36	0	not used	wire bridge SERDAT #6 RXD 6 57113000
Q....	9	50.03.0436	BC 237		W....	41	57.11.3000	0 Ohm	Bridge
Q....	10	50.03.0436	BC 237		W....	42	57.11.3000	0 Ohm	Bridge
Q....	11	50.03.0436	BC 237		W....	43	57.11.3000	0 Ohm	Bridge
Q....	12	50.03.0436	BC 237		W....	44	57.11.3000	0 Ohm	Bridge
Q....	13	50.03.0436	BC 237		W....	55	57.11.3000	0 Ohm	Bridge
Q....	14	50.03.0436	BC 237		W....	56	57.11.3000	0 Ohm	Bridge
Q....	15	50.03.0436	BC 237		W....	57	57.11.3000	0 Ohm	Bridge
Q....	16	50.03.0436	BC 237		W....	58	57.11.3000	0 Ohm	Bridge
Q....	17	50.03.0436	BC 237		W....	101	57.11.3000	0 Ohm	Bridge
Q....	18	50.03.0436	BC 237		W....	102	57.11.3000	0 Ohm	Bridge
Q....	19	50.03.0436	BC 237		W....	103	57.11.3000	0 Ohm	Bridge
Q....	20	50.03.0436	BC 237		W....	104	57.11.3000	0 Ohm	Bridge
Q....	21	50.03.0436	BC 237		W....	110	0	not used	used only for SEND LEVEL -100dB...+0dB
Q....	22	50.03.0436	BC 237		W....	111	0	not used	used only for SEND LEVEL -100dB...+10dB
Q....	23	50.03.0436	BC 237		W....	114	57.11.3000	0 Ohm	wire bridge SEND LEVEL -100dB...+40dB
Q....	24	50.03.0436	BC 237		W....	120	0	not used	used only for RETURN LEVEL -100dB...+0dB
Q....	25	50.03.0436	BC 237		W....	121	0	not used	used only for RETURN LEVEL -100dB...+10dB
Q....	26	50.03.0436	BC 237		W....	124	57.11.3000	0 Ohm	wire bridge RETURN LEVEL -100dB...+40dB
Q....	27	50.03.0436	BC 237		W....	140	0	not used	used only for PFL LEVEL -100dB...+0dB
Q....	28	50.03.0436	BC 237		W....	141	57.11.3000	0 Ohm	wire bridge PFL LEVEL -100dB...+10dB
Q....	29	50.03.0436	BC 237		W....	144	0	not used	used only for PFL LEVEL -100dB...+40dB
Q....	30	50.03.0436	BC 237		W....	160	0	not used	used only for PHONES LEVEL -100dB...+0dB
P....	1	0	not used	see MP 8	W....	161	0	not used	used only for PHONES LEVEL -100dB...+10dB
P....	2	54.14.2002	16 pin	PCB ribbon connector	W....	164	0	not used	used only for PHONES LEVEL -100dB...+40dB
P....	4	54.11.2013	2*16 pin	eurocard-connector	RZ....	1	57.88.4104	100 kOhm	2% resistor-network
P....	5	54.11.2013	2*16 pin	eurocard-connector	RZ....	2	57.88.4104	100 kOhm	2% resistor-network
R....	1	1.010.027.58	100 kOhm	Poti 20% lin SEND LEVEL	RZ....	3	57.88.4104	100 kOhm	2% resistor-network
R....	2	1.010.027.58	100 kOhm	Poti 20% lin RETURN LEVEL	RZ....	4	57.88.4104	100 kOhm	2% resistor-network
R....	4	1.010.027.58	100 kOhm	Poti used only in version without balance	RZ....	5	57.88.2682	6.8 kOhm	2% resistor-network
R....	5	0	not used	used only in balance version(1.010.032-58)	RZ....	6	57.88.4104	100 kOhm	2% resistor-network
R....	6	1.010.032.58	100 kOhm	Poti incl. R7 (100k lin) PHONES LEVEL/BAL	RZ....	7	57.88.2682	6.8 kOhm	2% resistor-network
R....	7	0	not used	see R 6	RZ....	8	57.88.2682	6.8 kOhm	2% resistor-network
R....	8	57.11.3104	100 kOhm	1% MF	RZ....	9	57.88.4104	100 kOhm	2% resistor-network
R....	9	57.11.3223	22 kOhm	1% MF	RZ....	10	57.88.2682	6.8 kOhm	2% resistor-network
R....	10	57.11.3104	100 kOhm	1% MF	RZ....	11	57.88.2682	6.8 kOhm	2% resistor-network
R....	11	57.11.3223	22 kOhm	1% MF	RZ....	12	57.88.4104	100 kOhm	2% resistor-network
R....	12	0	not used	used only in balance version (57113363)	RZ....	13	57.88.2682	6.8 kOhm	2% resistor-network
R....	13	0	not used	used only in balance version (57113363)	RZ....	14	57.88.2682	6.8 kOhm	2% resistor-network
R....	14	0	not used	used only in balance version (57113134)	RZ....	15	57.88.4104	100 kOhm	2% resistor-network
R....	15	0	not used	used only in balance version (57113134)	RZ....	16	57.88.2682	6.8 kOhm	2% resistor-network
R....	16	0	not used	used only in balance version (57113362)	RZ....	17	57.88.2682	6.8 kOhm	2% resistor-network
R....	17	0	not used	used only in balance version (57113473)	RZ....	18	57.88.2682	6.8 kOhm	2% resistor-network
R....	18	57.11.3104	100 kOhm	1% MF	RZ....	19	57.88.2682	6.8 kOhm	2% resistor-network
R....	19	57.11.3104	100 kOhm	1% MF	RZ....	20	57.88.2682	6.8 kOhm	2% resistor-network
R....	20	57.11.3223	22 kOhm	1% MF	RZ....	21	57.88.4101	100 Ohm	2% ,8*
R....	21	57.11.3363	36 kOhm	1% MF	RZ....	22	57.88.4101	100 Ohm	2% ,8*
R....	22	57.11.3363	36 kOhm	1% MF	RZ....	23	57.88.4101	100 Ohm	2% ,8*
R....	23	57.11.3134	130 kOhm	1% MF	RZ....	24	57.88.4101	100 Ohm	2% ,8*
R....	24	57.11.3134	130 kOhm	1% MF	RZ....	25	57.88.4101	100 Ohm	2% ,8*
R....	25	57.11.3362	3.6 kOhm	1% MF	RZ....	26	57.88.4101	100 Ohm	2% ,8*
R....	26	57.11.3473	47 kOhm	1% MF	RZ....	27	57.88.4101	100 Ohm	2% ,8*
R....	27	57.11.3104	100 kOhm	1% MF	RZ....	28	57.88.4101	100 Ohm	2% ,8*
R....	28	57.11.3104	100 kOhm	1% MF	RZ....	29	57.88.4101	100 Ohm	2% ,8*
R....	29	57.11.3223	22 kOhm	1% MF	RZ....	30	57.88.4101	100 Ohm	2% ,8*
R....	30	57.11.3101	100 Ohm	1% MF	RZ....	31	57.88.4101	100 Ohm	2% ,8*
R....	31	57.11.3101	100 Ohm	1% MF					
R....	32	57.11.3101	100 Ohm	1% MF					
R....	33	57.11.3101	100 Ohm	1% MF					
R....	34	57.11.3101	100 Ohm	1% MF					
R....	35	57.11.3101	100 Ohm	1% MF					
R....	36	57.11.3223	22 kOhm	1% MF					
R....	37	57.11.3223	22 kOhm	1% MF					
R....	38	57.11.3334	330 kOhm	1% MF					
R....	39	57.11.3334	330 kOhm	1% MF					
R....	40	57.11.3101	100 Ohm	1% MF					
R....	41	57.11.3101	100 Ohm	1% MF					
R....	42	57.11.3101	100 Ohm	1% MF					
R....	43	57.11.3101	100 Ohm	1% MF					
R....	44	57.11.3101	100 Ohm	1% MF					
R....	45	57.92.1820	82 mA	PTC 42 Ohm					
R....	46	57.92.1820	82 mA	PTC 42 Ohm					
R....	47	57.92.1820	82 mA	PTC 42 Ohm					
R....	55	57.92.7016	1.60 A	R-PTC 0.14 Ohm					
R....	164	57.11.3682	6.8 kOhm	1% MF					
W....	10	57.11.3000	0 Ohm	wire bridge SERDAT #0 (INT 0)					
W....	11	0	not used	wire bridge SERDAT #1 INT 1 57113000					
W....	12	0	not used	wire bridge SERDAT #2 INT 2 57113000					
W....	13	0	not used	wire bridge SERDAT #3 INT 3 57113000					
W....	14	0	not used	wire bridge SERDAT #4 INT 4 57113000					
W....	15	0	not used	wire bridge SERDAT #5 INT 5 57113000					
W....	16	0	not used	wire bridge SERDAT #6 INT 6 57113000					
W....	20	57.11.3000	0 Ohm	wire bridge SERDAT #0 (TSTB 0)					
W....	21	0	not used	wire bridge SERDAT #1 TSTB 1 57113000					
W....	22	0	not used	wire bridge SERDAT #2 TSTB 2 57113000					
W....	23	0	not used	wire bridge SERDAT #3 TSTB 3 57113000					

CER=Ceramic, PE=Polyester  
MF=Metal Film

1.990.440.00 PFL/TB/HEADPHONE UNIT SCA90/12/1200

## PFL / TB / Headphone Switch Board 1.990.449.00



MP 1 (5 x)

MP 2

Änderung					
Änderung	7.3.90	11/06	SCA	11	0
Datum	Änderung	Gezeichnet	Geprüft	Ges.	Index

Kopie für:

STUDER  
REGENSDORF  
ZÜRICH  
PFL / TB / PHONES  
SWITCH BOARDKopie für:  
1.990.449-00

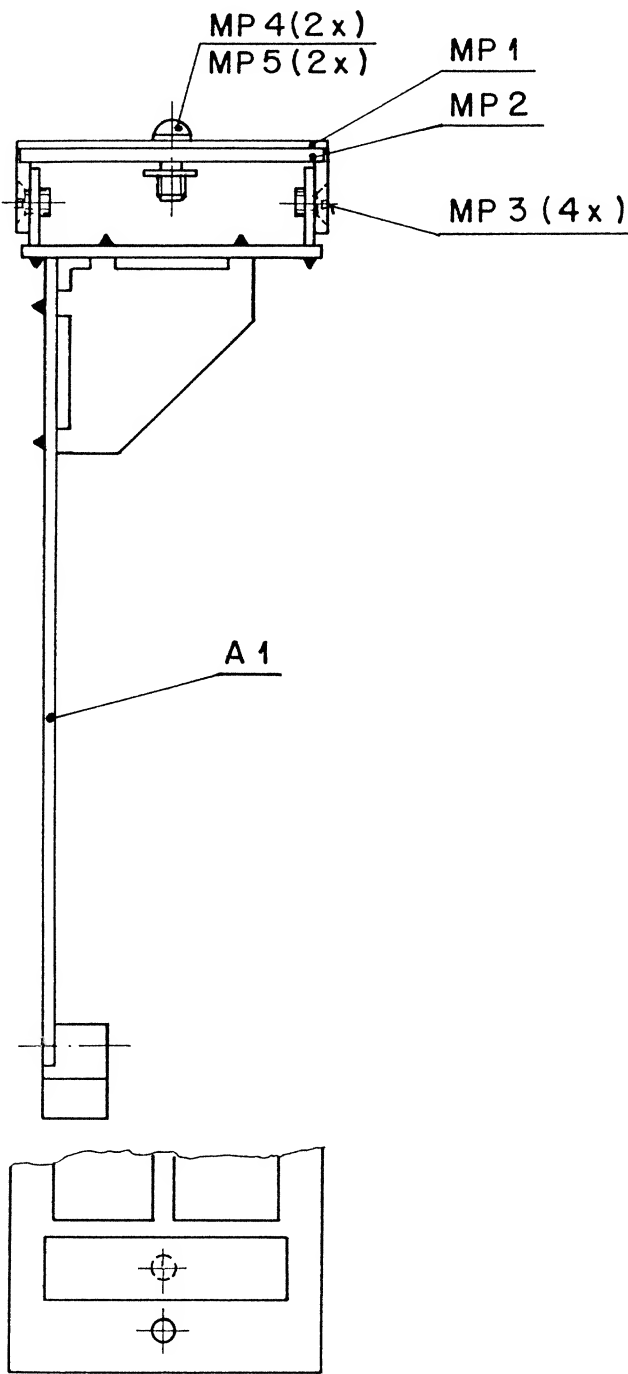
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DL....1	.	0	not used	see S 01	S....11	55.15.0722	Taste 1*A,12mm RT/RT	TEST GEN ENABLE	
DL....2	.	0	not used	see S 02	S....12	55.15.0704	Taste 1*A,12mm GB/Trans	LOCK	
DL....3	.	0	not used	see S 03	S....13	55.15.0705	Taste 1*A,12mm GN/Trans	PFL RESET	
DL....4	.	0	not used	see S 04	S....14	55.15.0704	Taste 1*A,12mm GB/Trans	SOLO RESET	
DL....5	.	0	not used	see S 05	S....15	55.15.0704	Taste 1*A,12mm GB/Trans	S.F. SOLO	
DL....6	.	0	not used	see S 06	S....16	55.15.0702	Taste 1*A,12mm RT/Trans	SOLO IN PLACE	
DL....7	.	0	not used	see S 07	S....17	55.15.0702	Taste 1*A,12mm RT/Trans	CUT	
DL....8	.	0	not used	see S 08	S....18	55.15.0704	Taste 1*A,12mm GB/Trans	CR SELECT	
DL....9	.	0	not used	see S 09	S....19	55.15.0704	Taste 1*A,12mm GB/Trans	STUDIO SELECT	
DL....10	.	0	not used	see S 10	S....20	55.15.0704	Taste 1*A,12mm GB/Trans	PFL/SOLO	
DL....11	.	0	not used	see S 11	S....21	55.15.0604	Taste 1*A, 5mm GB/Trans	BUS	
DL....12	.	0	not used	see S 12	S....22	55.15.0604	Taste 1*A, 5mm GB/Trans	DIRECT	
DL....13	.	0	not used	see S 13	S....23	55.15.0604	Taste 1*A, 5mm GB/Trans	AUX	
DL....14	.	0	not used	see S 14	S....24	55.15.0604	Taste 1*A, 5mm GB/Trans	GROUP	
DL....15	.	0	not used	see S 15	S....25	55.15.0604	Taste 1*A, 5mm GB/Trans	Summe	
DL....16	.	0	not used	see S 16	S....26	55.15.0602	Taste 1*A, 5mm RT/Trans	CR INJ	
DL....17	.	0	not used	see S 17	S....27	55.15.0602	Taste 1*A, 5mm RT/Trans	INTER LOCK	
DL....18	.	0	not used	see S 18	S....28	55.15.0605	Taste 1*A, 5mm GN/Trans	SAFE SELECT	
DL....19	.	0	not used	see S 19					
DL....20	.	0	not used	see S 20	RZ...21	57.88.4101	100 Ohm	2% ,8*	
DL....21	.	0	not used	see S 21	RZ...22	57.88.4101	100 Ohm	2% ,8*	
DL....22	.	0	not used	see S 22	RZ...23	57.88.4101	100 Ohm	2% ,8*	
DL....23	.	0	not used	see S 23	RZ...24	57.88.4101	100 Ohm	2% ,8*	
DL....24	.	0	not used	see S 24	RZ...25	57.88.4101	100 Ohm	2% ,8*	
DL....25	.	0	not used	see S 25	RZ...26	57.88.4101	100 Ohm	2% ,8*	
DL....26	.	0	not used	see S 26	RZ...27	57.88.4101	100 Ohm	2% ,8*	
DL....27	.	0	not used	see S 27	RZ...28	57.88.4101	100 Ohm	2% ,8*	
DL....28	.	0	not used	see S 28	RZ...29	57.88.4101	100 Ohm	2% ,8*	
					RZ...30	57.88.4101	100 Ohm	2% ,8*	
MP....1	1.990.100.05	5 pcs	Querprinthalter		RZ...31	57.88.4101	100 Ohm	2% ,8*	
MP....2	1.990.449.11	1 pcs	PFL/TB/PHONES SWITCH PCB						
MP....3	1.990.449.04	1 pcs	Nr-Etikette						
S....1	55.15.0722		Taste 1*A,12mm RT/RT	T/B EXT 1					
S....2	55.15.0702		Taste 1*A,12mm RT/Trans	T/B SEL.3					
S....3	55.15.0702		Taste 1*A,12mm RT/Trans	T/B SEL.4					
S....4	55.15.0722		Taste 1*A,12mm RT/RT	T/B INT					
S....5	55.15.0702		Taste 1*A,12mm RT/Trans	T/B SEL.1					
S....6	55.15.0702		Taste 1*A,12mm RT/Trans	T/B SEL.2					
S....7	55.15.0705		Taste 1*A,12mm GN/Trans	RETURN 2					
S....8	55.15.0705		Taste 1*A,12mm GN/Trans	T/B GROUP SELECT					
S....9	55.15.0704		Taste 1*A,12mm GB/Trans	AUTO CUE					
S....10	55.15.0705		Taste 1*A,12mm GN/Trans	RETURN 1					

## Pin Location List

PFL / Talk Back / Headphone Unit 1.990.440.00

P	NO	NAME	REMARK	
				B=BUS Q=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC -----
P4	01A	0V-L	GROUND SIGN (LOGIC)	B
P4	01B	+ 5.5V	+ SUPPLY	B
P4	02A	+ 15.5V	+ SUPPLY	B
P4	02B	0V-A	GROUND AUDIO	B
P4	03A	- 15.5V	- SUPPLY	B
P4	03B	+3...4V LED	LED SUPPLY VARIABLE +3...4V	B
P4	04A	DO 0	DATA OUT 0 (ENABLE)	
P4	04B	INT 0	INTERUPT 0	
P4	05A	INT 1	INTERUPT 1	
P4	05B	INT 2	INTERUPT 2	
P4	06A	INT 3	INTERUPT 3	
P4	06B	INT 4	INTERUPT 4	
P4	07A	INT 5	INTERUPT 5	
P4	07B	INT 6	INTERUPT 6	
P4	08A	TSTB 0	TRANSMIT STROBE 0	
P4	08B	TSTB 1	TRANSMIT STROBE 1	
P4	09A	TSTB 2	TRANSMIT STROBE 2	
P4	09B	TSTB 3	TRANSMIT STROBE 3	
P4	10A	TSTB 4	TRANSMIT STROBE 4	
P4	10B	TSTB 5	TRANSMIT STROBE 5	
P4	11A	TSTB 6	TRANSMIT STROBE 6	
P4	11B	RXD 0	RECEIVE DATA 0	
P4	12A	RXD 1	RECEIVE DATA 1	
P4	12B	RXD 2	RECEIVE DATA 2	
P4	13A	RXD 3	RECEIVE DATA 3	
P4	13B	RXD 4	RECEIVE DATA 4	
P4	14A	RXD 5	RECEIVE DATA 5	
P4	14B	RXD 6	RECEIVE DATA 6	
P4	15A	TXD	TRANSMIT DATA	
P4	15B	RSTB	RECEIVE STROBE	
P4	16A	TCL	TRANSMIT CLOCK	
P4	16B	RCL	RECEIVE CLOCK	
P5	01A	+4V	CONTROL VOLTAGE VCA	
P5	01B	+1V	CONTROL VOLTAGE VCA	
P5	02A	0V	CONTROL VOLTAGE VCA	
P5	02B	-10V	CONTROL VOLTAGE VCA	
P5	03A	CV-PHONES-L	CONTROL VOLTAGE HEADPHONE L	
P5	03B	CV-PHONES-R	CONTROL VOLTAGE HEADPHONE R	
P5	04A	CV-PFL-L	CONTROL VOLTAGE PFL LEFT	
P5	04B	CV-PFL-R	CONTROL VOLTAGE PFL RIGHT	
P5	05A	-	N.C.	
P5	05B	-	N.C.	
P5	06A	-	N.C.	
P5	06B	-	N.C.	
P5	07A	-	N.C.	
P5	07B	-	N.C.	
P5	08A	-	N.C.	
P5	08B	-	N.C.	
P5	09A	PHO.IN -1-L	PHONE INPUT 1 LEFT	
P5	09B	PHO.IN -1-R	PHONE INPUT 1 RIGHT	
P5	10A	PHO.OUT-1-L	PHONE OUTPUT 1 LEFT	
P5	10B	PHO.OUT-1-R	PHONE OUTPUT 1 RIGHT	
P5	11A	PHONE 1 0V	GROUND SIGN PHONE 1	
P5	11B	PHONE 2-0V	GROUND SIGN PHONE 2	
P5	12A	PHO.IN-2-L	INPUT PHONE 2 LEFT	
P5	12B	PHO.IN-2-R	INPUT PHONE 2 RIGHT	
P5	13A	CV-SEND	CTRL.VOLTAGE SEND LEVEL	
P5	13B	CV-RETURN	CTRL.VOLTAGE RETURN LEVEL	
P5	14	0V-L	GROUND SIGN (LOGIC)	
P5	15A	RXTH	RECEIVE DATA THROUGH	
P5	15B	TXTH	TRANSMIT DATA THROUGH	
P5	16	0V-L	GROUND SIGN (LOGIC)	

Source Selector Unit 1.990.490.00



Ad .POS. REF.No. DESCRIPTION MANUFACTURER

A.....1	1.990.498.00		SOURCE SELECTOR
MP....1	1.990.490.01	1 pcs	Frontschild SOURCE SELECTOR 20 PB
MP....2	1.990.490.02	1 pcs	Traeger SOURCE SELECTOR
MP....3	21.01.2352	4 pcs	S-Schr. M3*4
MP....4	1.010.022.21	2 pcs	Linienrundschr. IS M3*8
MP....5	24.16.3023	2 pcs	Wellensicherung 3mm
MP....6	1.990.490.04	1 pcs	Studer-Nr-Etikette 10*20

CER=Ceramic, PE=Polyester  
MF=Metal Film, PMG=Cermet

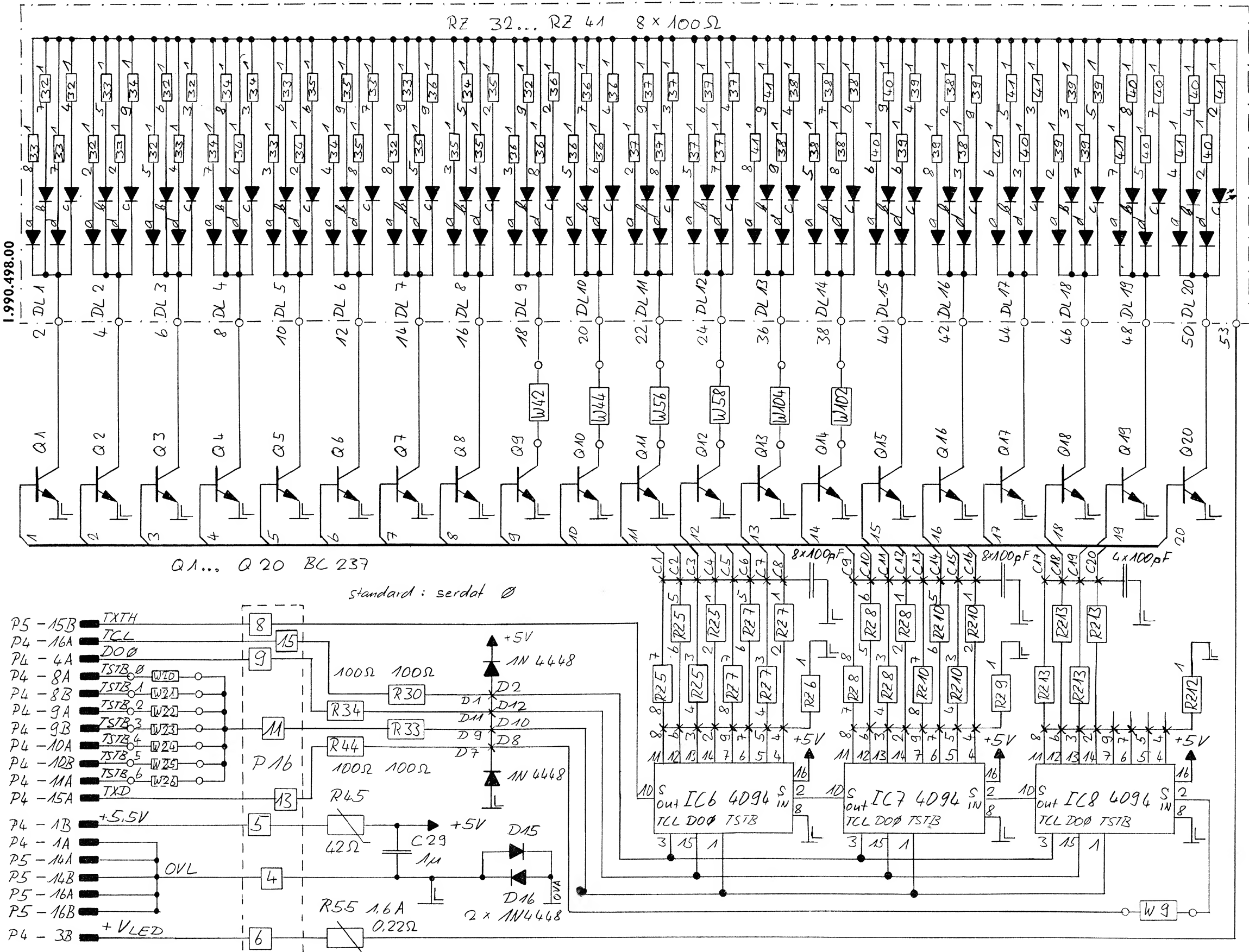
MANUFACTURER: Ex=Exar, NEC=Nippon Electric Corp., Ph=Philips, Ra=Raytheon,  
Sig=Signetics, St=Studer.

1.990.490.00 SOURCE SELECTOR UNIT 20 PB SCA88/11/3000

STUDER REGENSDORF ZURICH	Benennung SOURCE SELECTOR UNIT 20 PB	Nummer 1.990.490-00
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Ansicht					(3)
					(2)
					(1)
3.4.90	A. 1/4	SC4	11		(0)
Datum	Gez	Gedr	Ges	Index	
Kopie für					

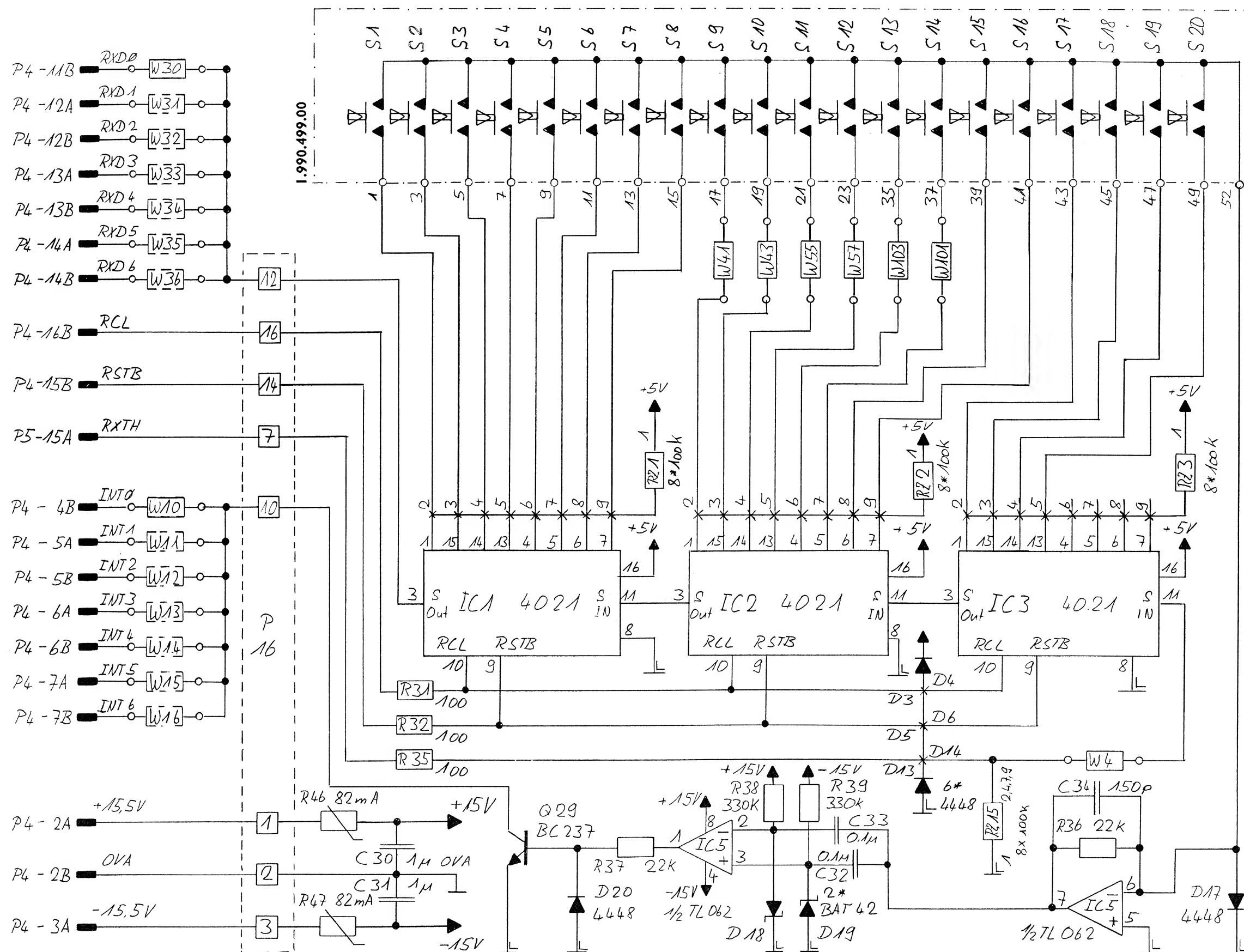
Source Selector Board 1.990.498.00  
- Source Selector Switch Board 1.990.499.00



8.5.90 A Schmid	...	...	PAGE 1 OF 2
INCL. SWITCH BOARD 1.990.499.00			SC 1.990.498.00
STUDER			

Source Selector Board 1.990.498.00

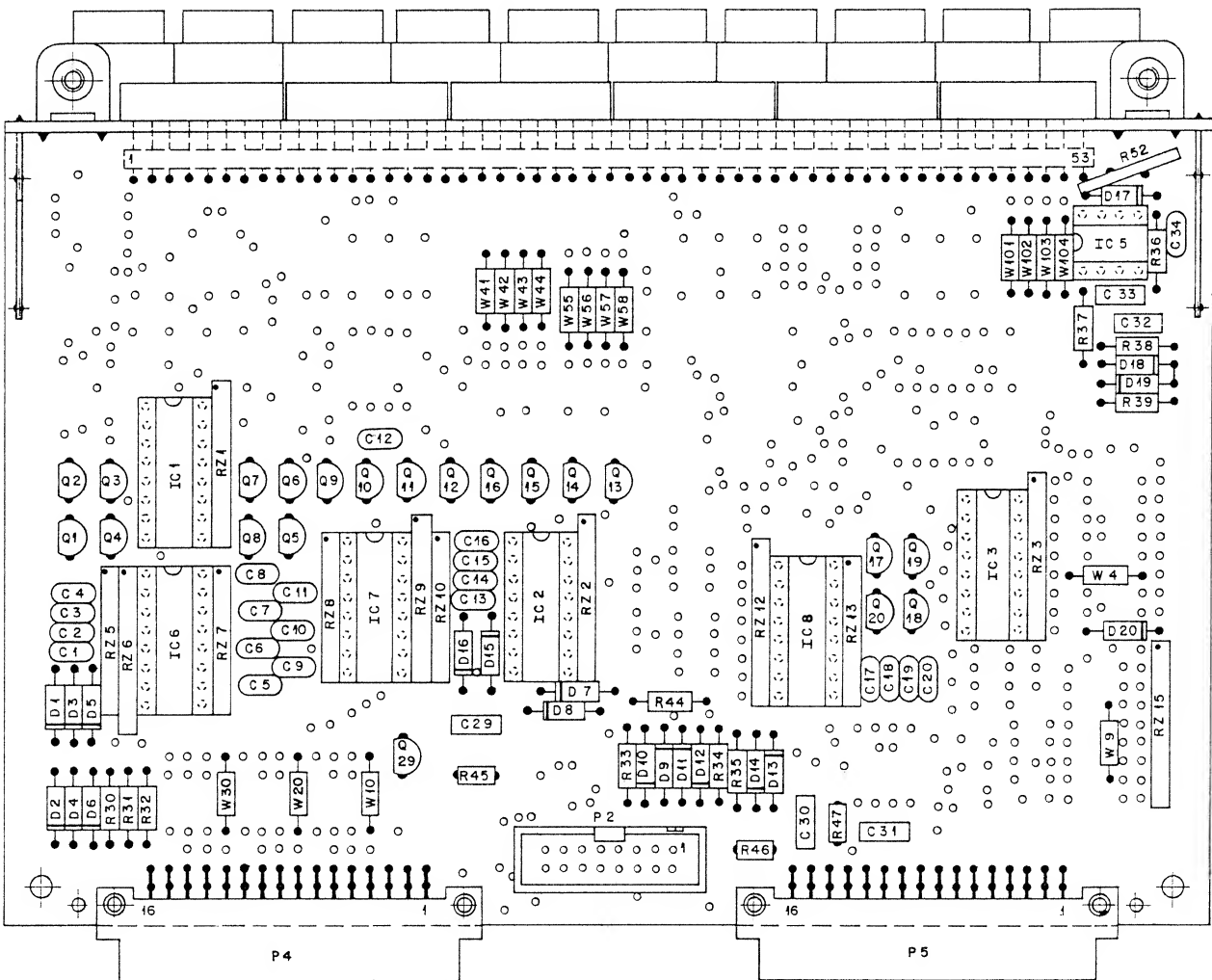
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Source Selector Board 1.990.498.00



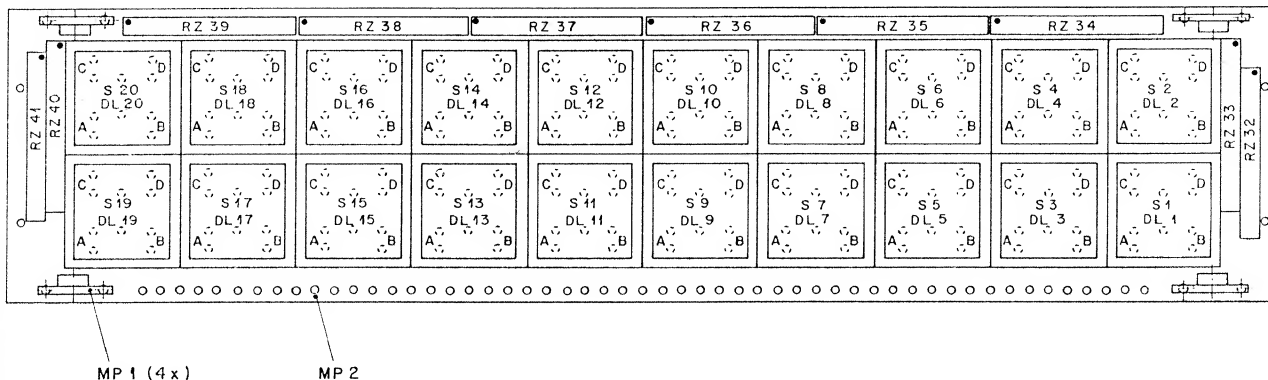
STUDER	SOURCE SELECTOR
REGENSDORF	BOARD
ZÜRICH	ESE
Nummer	1.990.498-00

Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER	Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER
A.....1	1.990.499.00		Source Selector Switch Board		R....36	57.11.3223	22 kOhm	1% MF	
C.....1	59.34.4101	100 pF	CE		R....37	57.11.3223	22 kOhm	1% MF	
C.....2	59.34.4101	100 pF	CE		R....38	57.11.3334	330 kOhm	1% MF	
C.....3	59.34.4101	100 pF	CE		R....39	57.11.3334	330 kOhm	1% MF	
C.....4	59.34.4101	100 pF	CE		R....44	57.11.3101	100 Ohm	1% MF	
C.....5	59.34.4101	100 pF	CE		R....45	57.92.1820	82 mA	PTC 42 Ohm	
C.....6	59.34.4101	100 pF	CE		R....46	57.92.1820	82 mA	PTC 42 Ohm	
C.....7	59.34.4101	100 pF	CE		R....47	57.92.1820	82 mA	PTC 42 Ohm	
C.....8	59.34.4101	100 pF	CE		R....55	57.92.7016	1.6 A	R-PTC 0.22 Ohm	
C.....9	59.34.4101	100 pF	CE		W.....4	57.11.3000	0 Ohm	Bridge	
C.....10	59.34.4101	100 pF	CE		W.....9	57.11.3000	0 Ohm	Bridge	
C.....11	59.34.4101	100 pF	CE		W.....10	57.11.3000	0 Ohm	Bridge	SERDAT #0 (INT 0)
C.....12	59.34.4101	100 pF	CE		W.....11	. . . 0	not used	wire bridge	SERDAT #1 INT 1 57113000
C.....13	59.34.4101	100 pF	CE		W.....12	. . . 0	not used	wire bridge	SERDAT #2 INT 2 57113000
C.....14	59.34.4101	100 pF	CE		W.....13	. . . 0	not used	wire bridge	SERDAT #3 INT 3 57113000
C.....15	59.34.4101	100 pF	CE		W.....14	. . . 0	not used	wire bridge	SERDAT #4 INT 4 57113000
C.....16	59.34.4101	100 pF	CE		W.....15	. . . 0	not used	wire bridge	SERDAT #5 INT 5 57113000
C.....17	59.34.4101	100 pF	CE		W.....16	. . . 0	not used	wire bridge	SERDAT #6 INT 6 57113000
C.....18	59.34.4101	100 pF	CE		W.....20	57.11.3000	0 Ohm	wire bridge	SERDAT #0 (TSTB 0)
C.....19	59.34.4101	100 pF	CE		W.....21	. . . 0	not used	wire bridge	SERDAT #1 TSTB 1 57113000
C.....20	59.34.4101	100 pF	CE		W.....22	. . . 0	not used	wire bridge	SERDAT #2 TSTB 2 57113000
C.....29	59.06.0104	100 nF	PE		W.....23	. . . 0	not used	wire bridge	SERDAT #3 TSTB 3 57113000
C.....30	59.06.0104	100 nF	PE		W.....24	. . . 0	not used	wire bridge	SERDAT #4 TSTB 4 57113000
C.....31	59.06.0104	100 nF	PE		W.....25	. . . 0	not used	wire bridge	SERDAT #5 TSTB 5 57113000
C.....32	59.06.0104	100 nF	PE		W.....26	. . . 0	not used	wire bridge	SERDAT #6 TSTB 6 57113000
C.....33	59.06.0104	100 nF	PE		W.....30	57.11.3000	0 Ohm	wire bridge	SERDAT #0 (RXD 0)
C.....34	59.34.7151	150 pF	CE		W.....31	. . . 0	not used	wire bridge	SERDAT #1 RXD 1 57113000
D.....1	50.04.0125	1N4448			W.....32	. . . 0	not used	wire bridge	SERDAT #2 RXD 2 57113000
D.....2	50.04.0125	1N4448			W.....33	. . . 0	not used	wire bridge	SERDAT #3 RXD 3 57113000
D.....3	50.04.0125	1N4448			W.....34	. . . 0	not used	wire bridge	SERDAT #4 RXD 4 57113000
D.....4	50.04.0125	1N4448			W.....35	. . . 0	not used	wire bridge	SERDAT #5 RXD 5 57113000
D.....5	50.04.0125	1N4448			W.....36	. . . 0	not used	wire bridge	SERDAT #6 RXD 6 57113000
D.....6	50.04.0125	1N4448			W.....41	57.11.3000	0 Ohm	Bridge	
D.....7	50.04.0125	1N4448			W.....42	57.11.3000	0 Ohm	Bridge	
D.....8	50.04.0125	1N4448			W.....43	57.11.3000	0 Ohm	Bridge	
D.....9	50.04.0125	1N4448			W.....44	57.11.3000	0 Ohm	Bridge	
D.....10	50.04.0125	1N4448			W.....55	57.11.3000	0 Ohm	Bridge	
D.....11	50.04.0125	1N4448			W.....56	57.11.3000	0 Ohm	Bridge	
D.....12	50.04.0125	1N4448			W.....57	57.11.3000	0 Ohm	Bridge	
D.....13	50.04.0125	1N4448			W.....58	57.11.3000	0 Ohm	Bridge	
D.....14	50.04.0125	1N4448			W.....101	57.11.3000	0 Ohm	Bridge	
D.....15	50.04.0125	1N4448			W.....102	57.11.3000	0 Ohm	Bridge	
D.....16	50.04.0125	1N4448			W.....103	57.11.3000	0 Ohm	Bridge	
D.....17	50.04.0125	1N4448			W.....104	57.11.3000	0 Ohm	Bridge	
D.....18	50.04.0127	BAT 42			RZ....1	57.88.4104	100 kOhm	2% resistor-network	
D.....19	50.04.0127	BAT 42			RZ....2	57.88.4104	100 kOhm	2% resistor-network	
D.....20	50.04.0125	1N4448			RZ....3	57.88.4104	100 kOhm	2% resistor-network	
IC....1	50.07.1021	CD4021	8-bit static shift register		RZ....5	57.88.2682	6.8 kOhm	2% resistor-network	
IC....2	50.07.1021	CD4021	8-bit static shift register		RZ....6	57.88.4104	100 kOhm	2% resistor-network	
IC....3	50.07.1021	CD4021	8-bit static shift register		RZ....7	57.88.2682	6.8 kOhm	2% resistor-network	
IC....5	50.09.0119	TL 062	J FET dual op. amp.		RZ....8	57.88.2682	6.8 kOhm	2% resistor-network	
IC....6	50.07.0018	CD4094	shift and store bus register		RZ....9	57.88.2682	6.8 kOhm	2% resistor-network	
IC....7	50.07.0018	CD4094	shift and store bus register		RZ....10	57.88.4104	100 kOhm	2% resistor-network	
IC....8	50.07.0018	CD4094	shift and store bus register		RZ....12	57.88.4104	100 kOhm	2% resistor-network	
MP....1	53.03.0166	1 pcs	IC-Socket 8-pin		RZ....13	57.88.2682	6.8 kOhm	2% resistor-network	
MP....2	53.03.0168	6 pcs	IC-Socket 16-pin		RZ....15	57.88.4104	100 kOhm	2% resistor-network	
MP....3	54.11.0125	53 pcs	Stiftleiste Winkel RM 2.54						
MP....4	1.990.100.01	2 pcs	Querprintstutze						
MP....5	1.990.420.11	1 pcs	CR MONITOR PCB						
MP....6	28.99.0119	4 pcs	Rohrniete 2.5*0.1510						
MP....7	43.01.0108	1 pcs	ESE-Schild						
MP....8	1.990.498.04	1 pcs	Nr-Etikette						
Q.....1	50.03.0436	BC237	uni npn						
Q.....2	50.03.0436	BC237	uni npn						
Q.....3	50.03.0436	BC237	uni npn						
Q.....4	50.03.0436	BC237	uni npn						
Q.....5	50.03.0436	BC237	uni npn						
Q.....6	50.03.0436	BC237	uni npn						
Q.....7	50.03.0436	BC237	uni npn						
Q.....8	50.03.0436	BC237	uni npn						
Q.....9	50.03.0436	BC237	uni npn						
Q.....10	50.03.0436	BC237	uni npn						
Q.....11	50.03.0436	BC237	uni npn						
Q.....12	50.03.0436	BC237	uni npn						
Q.....13	50.03.0436	BC237	uni npn						
Q.....14	50.03.0436	BC237	uni npn						
Q.....15	50.03.0436	BC237	uni npn						
Q.....16	50.03.0436	BC237	uni npn						
Q.....17	50.03.0436	BC237	uni npn						
Q.....18	50.03.0436	BC237	uni npn						
Q.....19	50.03.0436	BC237	uni npn						
Q.....20	50.03.0436	BC237	uni npn						
Q.....29	50.03.0436	BC237	uni npn						
P.....1	. . . 0	not used	see MP						
P.....2	54.14.2002	16 pin	PCB ribbon-connector						
P.....4	54.11.2013	2*16 pin	eurocard-connector						
P.....5	54.11.2013	2*16 pin	eurocard-connector						
R....30	57.11.3101	100 Ohm	1% MF						
R....31	57.11.3101	100 Ohm	1% MF						
R....32	57.11.3101	100 Ohm	1% MF						
R....33	57.11.3101	100 Ohm	1% MF						
R....34	57.11.3101	100 Ohm	1% MF						
R....35	57.11.3101	100 Ohm	1% MF						

CER=Ceramic, PE=Polyester  
MF=Metal Film, PMG=Cermet  
MANUFACTURER: Ex=Exar, NEC=Nippon Electric Corp., Ph=Philips, Ra=Raytheon, Sig=Signetics, St=Studer.  
1.990.498.00 SOURCE SELECTOR SCA90/04/2700

END

## Source Selector Switch Board 1.990.499.00



Ad ..POS.. ..REF.No... DESCRIPTION.....MANUFACTURER

DL...1	.	.	0	not used	see S 01
DL...2	.	.	0	not used	see S 02
DL...3	.	.	0	not used	see S 03
DL...4	.	.	0	not used	see S 04
DL...5	.	.	0	not used	see S 05
DL...6	.	.	0	not used	see S 06
DL...7	.	.	0	not used	see S 07
DL...8	.	.	0	not used	see S 08
DL...9	.	.	0	not used	see S 09
DL...10	.	.	0	not used	see S 10
DL...11	.	.	0	not used	see S 11
DL...12	.	.	0	not used	see S 12
DL...13	.	.	0	not used	see S 13
DL...14	.	.	0	not used	see S 14
DL...15	.	.	0	not used	see S 15
DL...16	.	.	0	not used	see S 16
DL...17	.	.	0	not used	see S 17
DL...18	.	.	0	not used	see S 18
DL...19	.	.	0	not used	see S 19
DL...20	.	.	0	not used	see S 20
MP...1	1.990.429.11	1	pcs	CR MONITOR SWITCH PCB	
MP...2	1.990.100.05	4	pcs	Querprintstuetze	
MP...3	1.990.499.04	1	pcs	Nr-Etikette	
S....1	55.15.0704			Taste 1*A,12mm gelb /trans	
S....2	55.15.0704			Taste 1*A,12mm gelb /trans	
S....3	55.15.0704			Taste 1*A,12mm gelb /trans	
S....4	55.15.0704			Taste 1*A,12mm gelb /trans	
S....5	55.15.0704			Taste 1*A,12mm gelb /trans	
S....6	55.15.0704			Taste 1*A,12mm gelb /trans	
S....7	55.15.0704			Taste 1*A,12mm gelb /trans	
S....8	55.15.0704			Taste 1*A,12mm gelb /trans	
S....9	55.15.0704			Taste 1*A,12mm gelb /trans	
S....10	55.15.0704			Taste 1*A,12mm gelb /trans	
S....11	55.15.0704			Taste 1*A,12mm gelb /trans	
S....12	55.15.0704			Taste 1*A,12mm gelb /trans	
S....13	55.15.0704			Taste 1*A,12mm gelb /trans	
S....14	55.15.0704			Taste 1*A,12mm gelb /trans	
S....15	55.15.0704			Taste 1*A,12mm gelb /trans	
S....16	55.15.0704			Taste 1*A,12mm gelb /trans	
S....17	55.15.0704			Taste 1*A,12mm gelb /trans	
S....18	55.15.0704			Taste 1*A,12mm gelb /trans	
S....19	55.15.0704			Taste 1*A,12mm gelb /trans	
S....20	55.15.0704			Taste 1*A,12mm gelb /trans	
RZ...32	57.88.4101	100	Ohm	2%,8*	
RZ...33	57.88.4101	100	Ohm	2%,8*	
RZ...34	57.88.4101	100	Ohm	2%,8*	
RZ...35	57.88.4101	100	Ohm	2%,8*	
RZ...36	57.88.4101	100	Ohm	2%,8*	
RZ...37	57.88.4101	100	Ohm	2%,8*	
RZ...38	57.88.4101	100	Ohm	2%,8*	
RZ...39	57.88.4101	100	Ohm	2%,8*	
RZ...40	57.88.4101	100	Ohm	2%,8*	
RZ...41	57.88.4101	100	Ohm	2%,8*	

CER=Ceramic, PE=Polyester  
MF=Metal Film, PMG=Cermet

MANUFACTURER: Ex=Exar, NEC=Nippon Electric Corp., Ph=Philips, Ra=Raytheon,  
Sig=Signetics, St=Studer.

1.990.499.00 SOURCE SELECTOR SWITCH BOARD SCA88/12/1800

Änderung					(3)
Änderung					(2)
Änderung					(1)
Ausgabe	6.3.90	11.10.90	SCA	11	(6)
Datum		Grz	Grp	Grp	Index
Kopie für					
Nummer	1.990.499-00				

STUDER  
REGENSDORF  
ZÜRICH

Benennung: SOURCE SELECTOR  
SWITCH BOARD

Nummer: 1.990.499-00



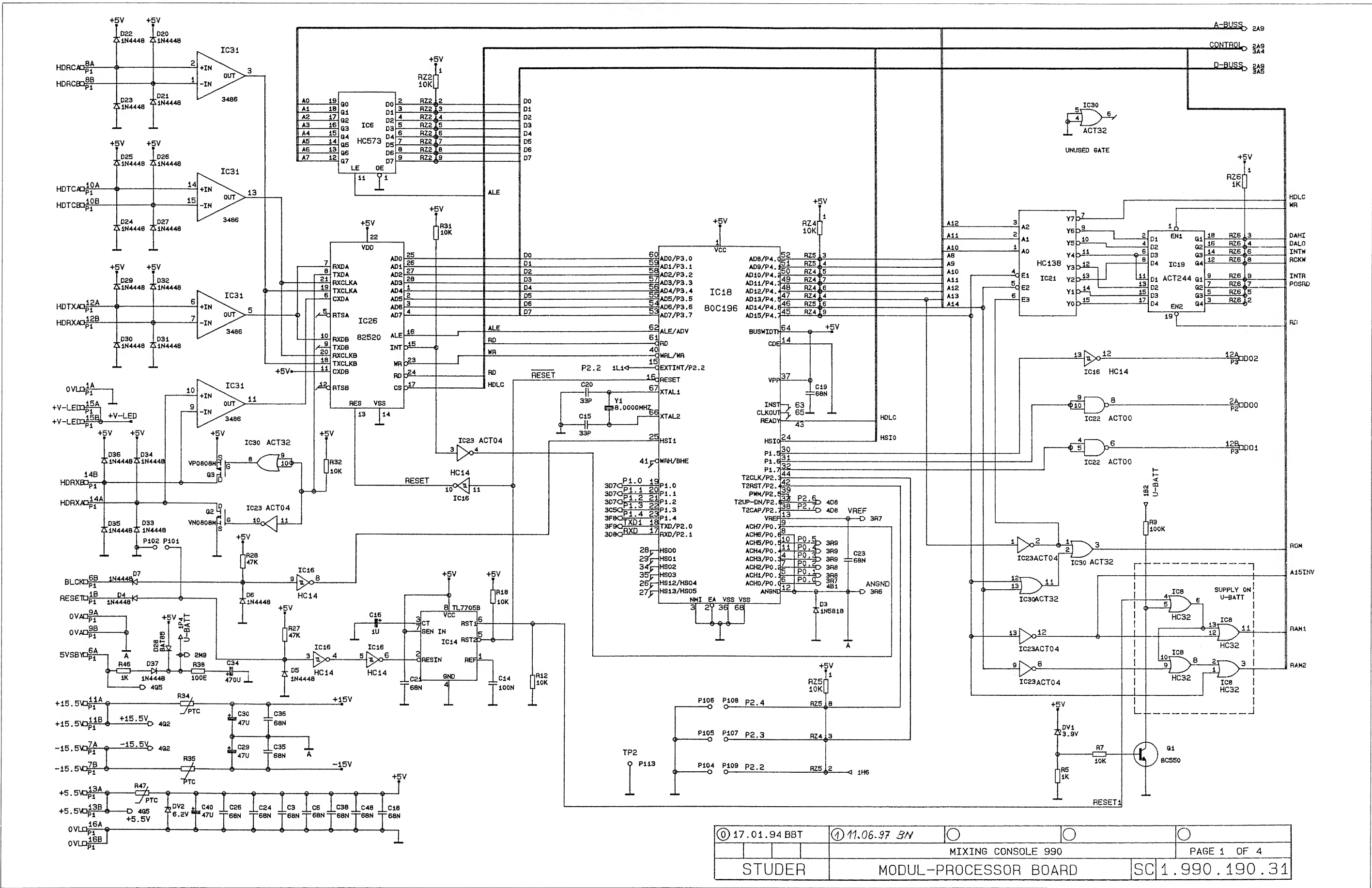
**SCHEMATA / CIRCUIT DIAGRAMS**

**Processor and Interface Units**

Modul Processor Board .....	1.990.190.31
Serdat Master Interface .....	1.990.496.00
Serdat Slave Interface .....	1.990.497.00

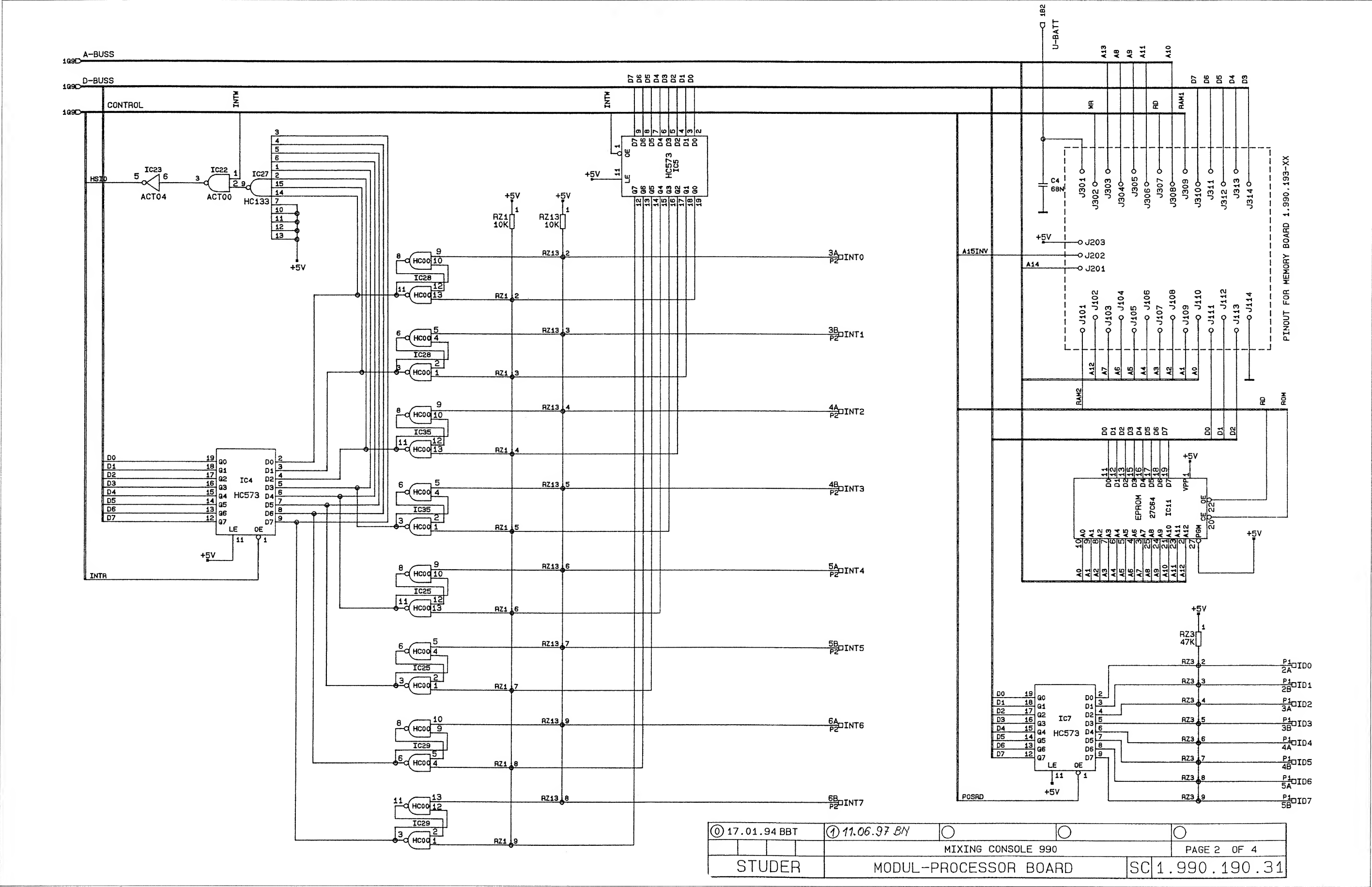


Modul Processor Board 1.990.190.31

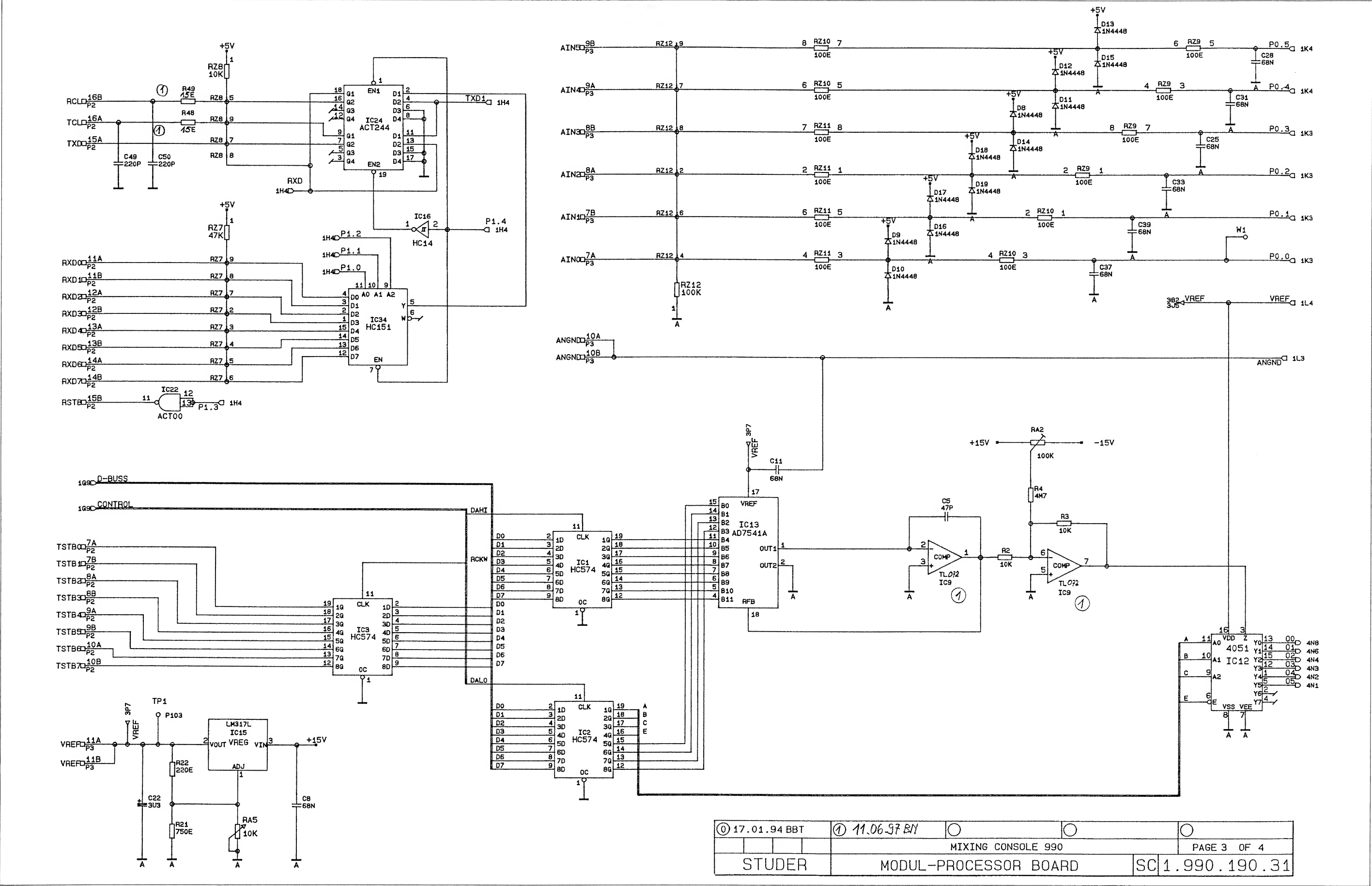




Modul Processor Board 1.990.190.31

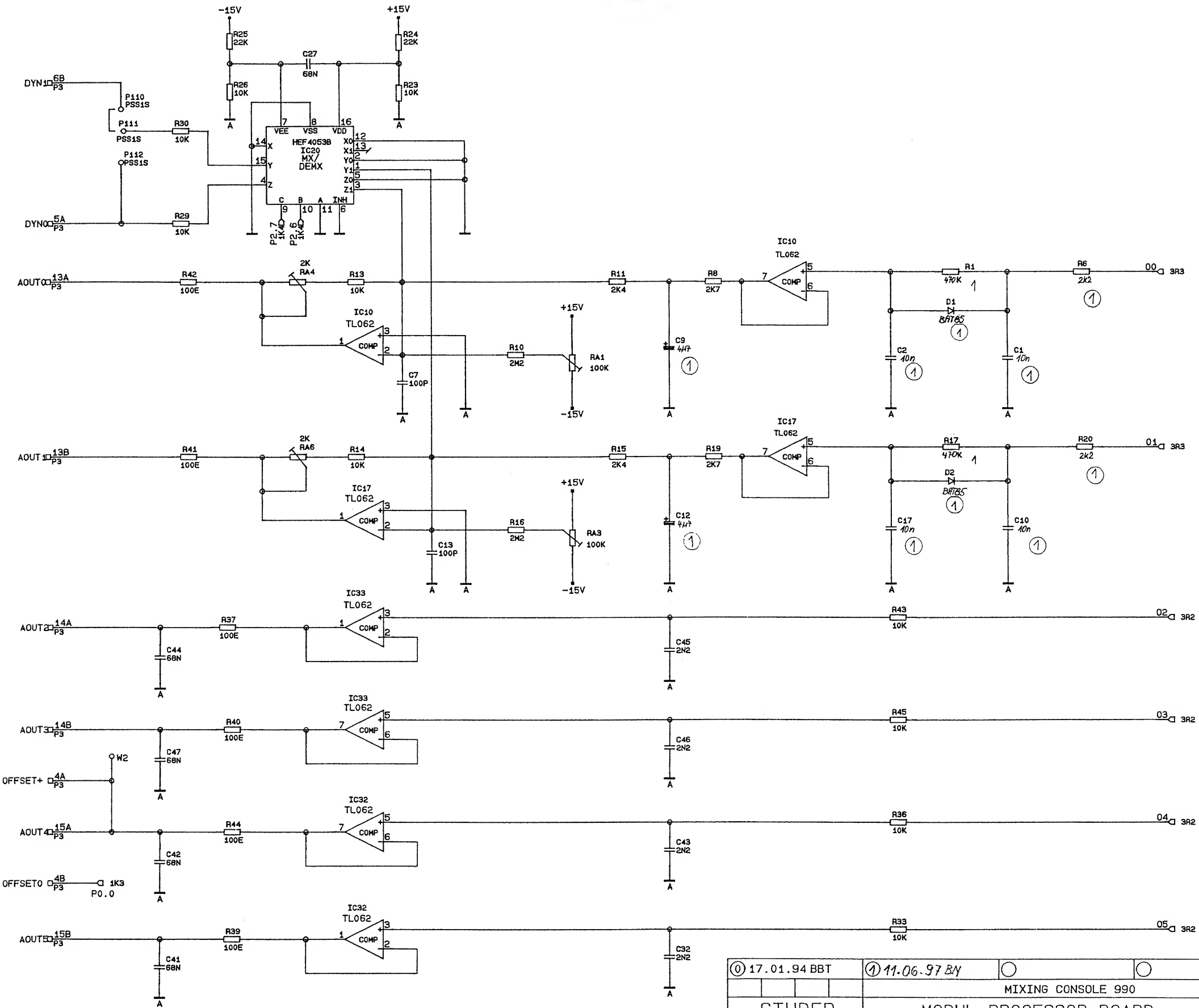


Modul Processor Board 1.990.190.31



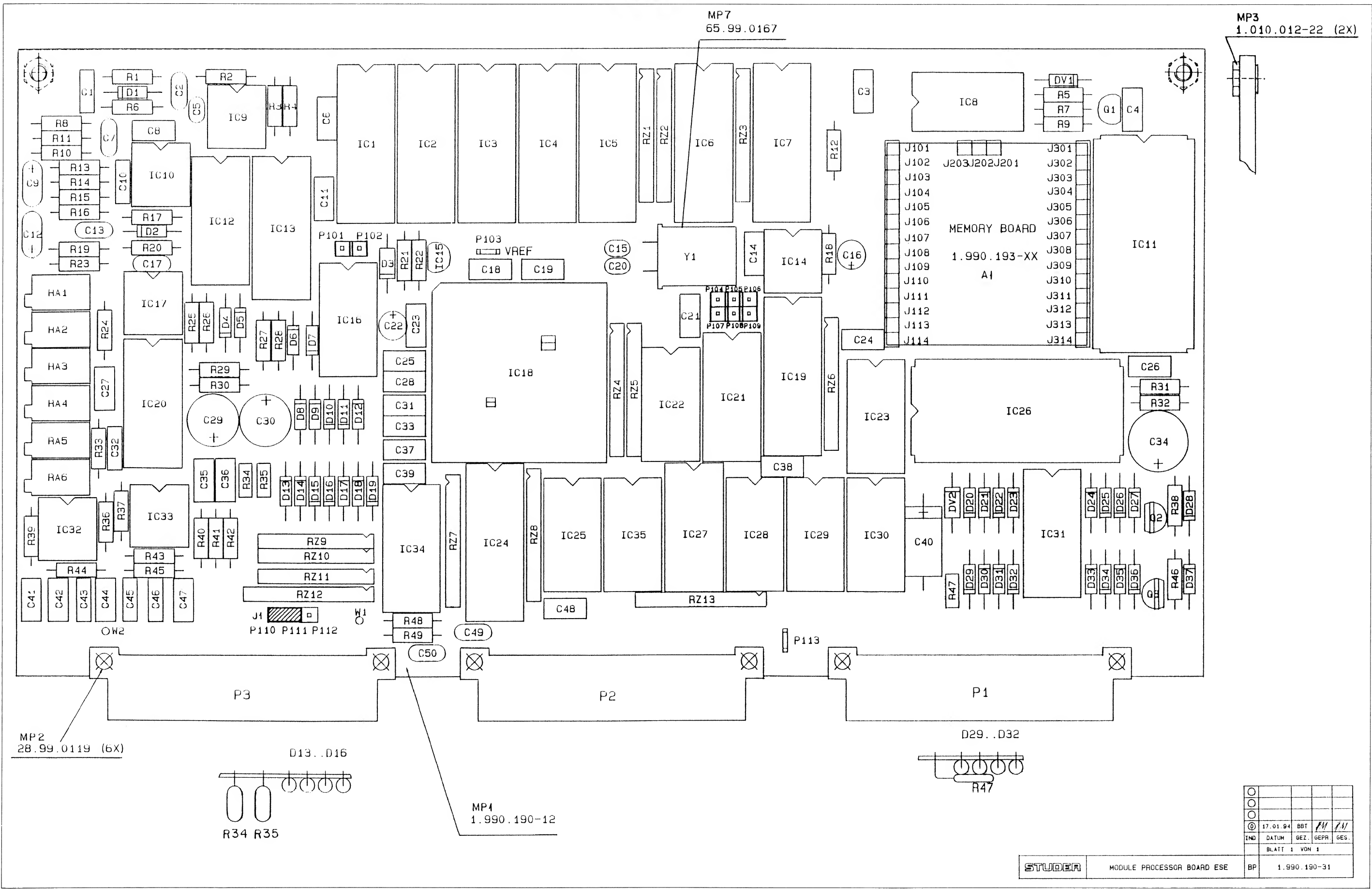


Modul Processor Board 1.990.190.31



① 17.01.94 BBT	① 11.06.97 BY	○	○	○
MIXING CONSOLE 990				PAGE 4 OF 4
STUDER		MODUL-PROCESSOR BOARD		SC 1.990.190.31

Modul Processor Board 1.990.190.31



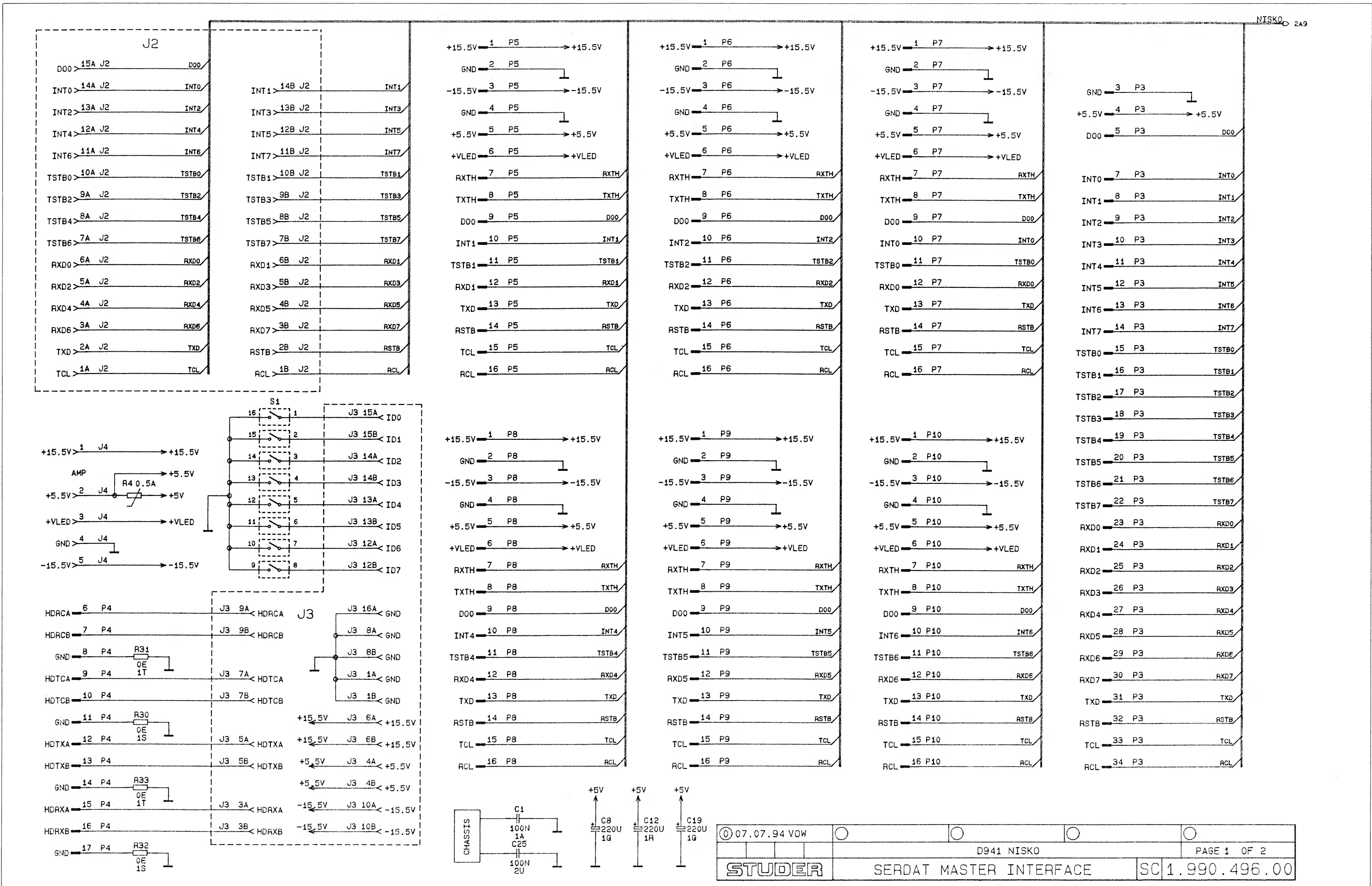


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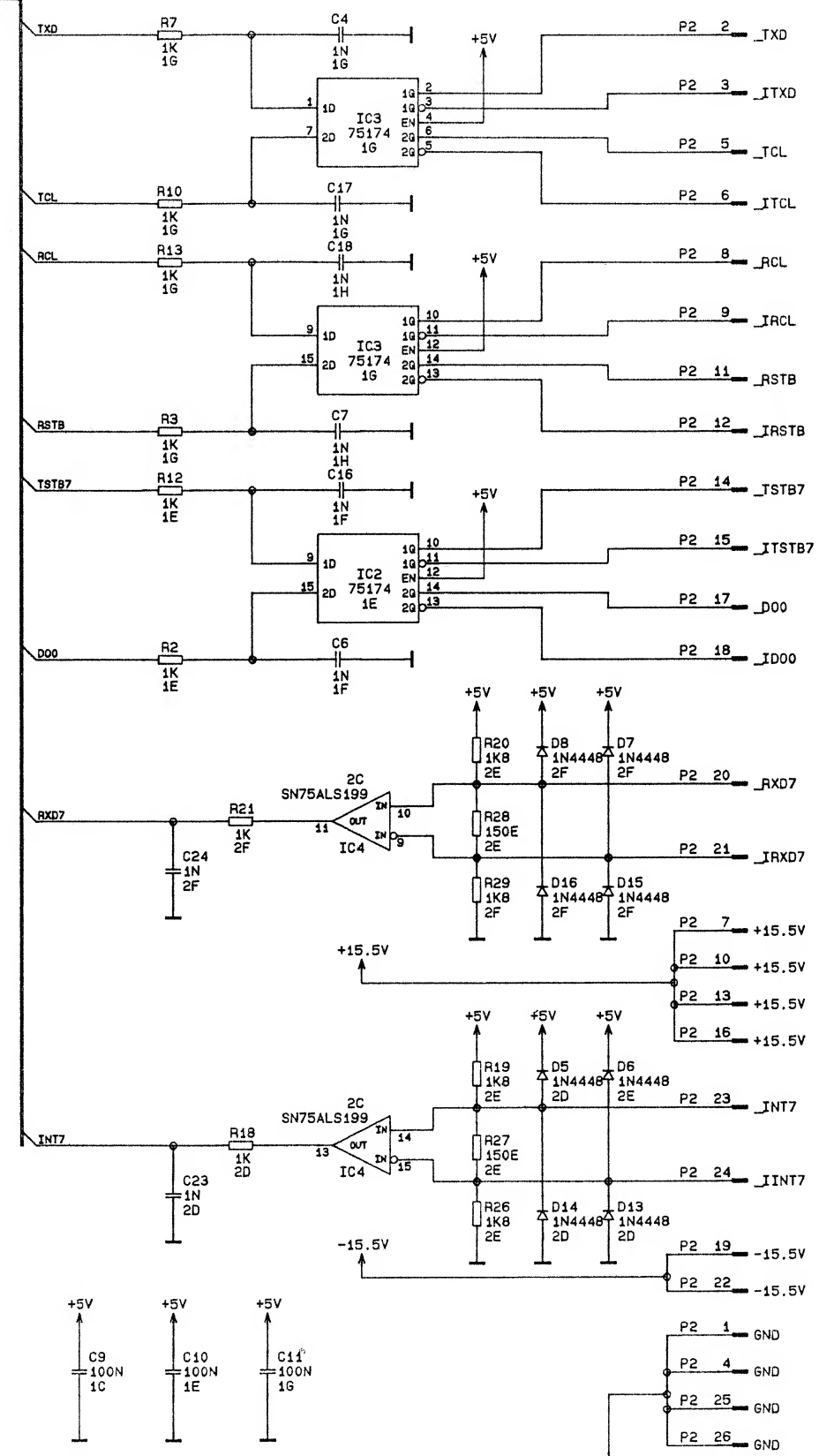
Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	A 1	1.990.193.00			MEMORY BOARD ,A	0	D 30	50.04.0125	1N4448		D 1N 4448, SI	0	MP 1	1.990.190.12			MODULE PROCESSOR PCB	0	RA 4	58.05.0202	2k	R	2 K , 10%, .5 W , PMG
0	C 1	59.06.0222	2n2	C	2200 P , 10%, 63V , PETP	0	D 31	50.04.0125	1N4448		D 1N 4448, SI	0	MP 2	28.99.0119	6 pcs		ROHRNIETE D 2.5*0.15* 9	0	RA 5	58.05.0103	10k	R	10 K , 10%, .5 W , PMG
0	C 2	59.34.4221	220p	C	220 P , 5%, N750 , CER	0	D 32	50.04.0125	1N4448		D 1N 4448, SI	0	MP 3	1.010.012.22	2 pcs		NIETMUTTER SW 6 M 3 * 2	0	RA 6	58.05.0202	2k	R	2 K , 10%, .5 W , PMG
0	C 3	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	D 33	50.04.0125	1N4448		D 1N 4448, SI	0	MP 4	1.101.001.31			TEXT-ETIK. 5*20 HARDWARE -31						
0	C 4	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	D 34	50.04.0125	1N4448		D 1N 4448, SI	0	MP 5	1.990.190.04			NR.-ETIKETTE 5 * 20	0	RZ 1	57.88.4103	10k	RZ	8 * 10 K, 2%, SIP 9
0	C 5	59.34.2470	47p	C	47 P , 5%, N150 , CER	0	D 35	50.04.0125	1N4448		D 1N 4448, SI	0	MP 6	43.01.0108			ESE-WARNSCHILD	0	RZ 2	57.88.4103	10k	RZ	8 * 10 K, 2%, SIP 9
0	C 6	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	D 36	50.04.0125	1N4448		D 1N 4448, SI	0	MP 7	65.99.0167			POLYURH. KLEBBAND WS, 9* 3	0	RZ 3	57.88.4473	47k	RZ	8 * 47 K, 2%, SIP 9
0	C 7	59.34.2101	100p	C	100 P , 5%, N150 , CER	0	D 37	50.04.0125	1N4448		D 1N 4448, SI	0	P 1	54.11.2013	32-P		P EU-BK 2 * 16	0	RZ 4	57.88.4103	10k	RZ	8 * 10 K, 2%, SIP 9
0	C 8	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	DV 1	50.04.1101	3.9V		D 3.9 V, 5%, .40W, Z,	0	P 2	54.11.2013	32-P		P EU-BK 2 * 16	0	RZ 5	57.88.4103	10k	RZ	8 * 10 K, 2%, SIP 9
0	C 9	59.26.2229	2u2	C	2.2 U , 20%, 16V , SAL	0	DV 2	50.04.1511	6.2V		D 6.2 V, 5%, 1.0W, Z,	0	P 3	54.11.2013	32-P		P EU-BK 2 * 16	0	RZ 6	57.88.4102	1k	RZ	8 * 1 K, 2%, SIP 9
0	C 10	59.06.0222	2n2	C	2200 P , 10%, 63V , PETP	0	IC 1	50.17.1574	74HC574		IC ... 74 HC 574 .. , A	0	P 101	54.01.0020	1-P		P STIFT .63*.63, H=5.8/3.4	0	RZ 7	57.88.4473	47k	RZ	8 * 47 K, 2%, SIP 9
0	C 11	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 2	50.17.1574	74HC574		IC ... 74 HC 574 .. , A	0	P 102	54.01.0020	1-P		P STIFT .63*.63, H=5.8/3.4	0	RZ 8	57.88.4103	10k	RZ	8 * 10 K, 2%, SIP 9
0	C 12	59.26.2229	2u2	C	2.2 U , 20%, 16V , SAL	0	IC 3	50.17.1574	74HC574		IC ... 74 HC 574 .. , A	0	P 103	54.02.0320	1-P		P FLACH, 2.8*0.8, GERADE	0	RZ 9	57.88.2101	R 4*100R	RZ	4 * 100 , 2%, SIP 8
0	C 13	59.34.2101	100p	C	100 P , 5%, N150 , CER	0	IC 4	50.17.1573	74HC573		IC ... 74 HC 573 .. , A	0	P 104	54.01.0020	1-P		P STIFT .63*.63, H=5.8/3.4	0	RZ 10	57.88.2101	R 4*100R	RZ	4 * 100 , 2%, SIP 8
0	C 14	59.06.0104	100n	C	.1 U , 10%, 63V , PETP	0	IC 5	50.17.1573	74HC573		IC ... 74 HC 573 .. , A	0	P 105	54.01.0020	1-P		P STIFT .63*.63, H=5.8/3.4	0	RZ 11	57.88.2101	R 4*100R	RZ	4 * 100 , 2%, SIP 8
0	C 15	59.34.2330	33p	C	33 P , 5%, N150 , CER	0	IC 6	50.17.1573	74HC573		IC ... 74 HC 573 .. , A	0	P 106	54.01.0020	1-P		P STIFT .63*.63, H=5.8/3.4	0	RZ 12	57.88.4104	100k	RZ	8 * 100 K, 2%, SIP 9
0	C 16	59.30.6109	1u	C	1 U , 20%, 35V , TA	0	IC 7	50.17.1573	74HC573		IC ... 74 HC 573 .. , A	0	P 107	54.01.0020	1-P		P STIFT .63*.63, H=5.8/3.4	0	RZ 13	57.88.4103	10k	RZ	8 * 10 K, 2%, SIP 9
0	C 17	59.34.4221	220p	C	220 P , 5%, N750 , CER	0	IC 8	50.17.1032	74HC32		IC ... 74 HC 32 .. , A	0	P 108	54.01.0020	1-P		P STIFT .63*.63, H=5.8/3.4	0	XIC 10	53.03.0166		XIC	DIL 8-POL
0	C 18	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 9	50.09.0119	TL062		IC TL 062 ACP , A	0	P 109	54.01.0020	1-P		P STIFT .63*.63, H=5.8/3.4	0	XIC 11	53.03.0173		XIC	DIL 28-POL,
0	C 19	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 10	50.09.0119	TL062		IC TL 062 ACP , A	0	P 110	54.01.0020	1-P		P STIFT .63*.63, H=5.8/3.4	0	XIC 12	53.03.0168		XIC	DIL 16-POL
0	C 20	59.34.2330	33p	C	33 P , 5%, N150 , CER	0	IC 11	50.14.0155	27C84		IC NMC 27 C 64 Q 200 , A (SW. 1.990.993.30)	0	P 111	54.01.0020	1-P		P STIFT .63*.63, H=5.8/3.4	0	XIC 13	53.03.0175		XIC	DIL 18-POL,
0	C 21	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 12	50.07.0051	4051		IC ... 4051 .. , A	0	P 112	54.01.0020	1-P		P STIFT .63*.63, H=5.8/3.4	0	XIC 17	53.03.0166		XIC	DIL 8-POL
0	C 22	59.30.4339	3u3	C	3.3 U , 20%, 16V , TA	0	IC 13	50.19.0102	AD7541A		IC AD 7541 JN, MP 7623 JN , A	0	XIC 18	53.03.0168			XIC PLCC 68 PIN	0	XIC 18	53.03.2268		XIC	PLCC 68 PIN
0	C 23	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 14	50.11.0157	TL7705B		IC TL 7705 BCP, , A	0	P 113	54.02.0320	1-P		P FLACH, 2.8*0.8, GERADE	0	XIC 31	53.03.0168		XIC	DIL 16-POL
0	C 25	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 15	50.10.0108	LM317L		IC LM 317 LZ, , A	0	Q 1	50.03.0407		BC550C	Q BC 550 C,	0	Y 1	89.01.1008	8.0000MHz	Y	8.000 MHZ, HC 18/U
0	C 26	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 16	50.17.1014	74HC14		IC ... 74 HC 14 .. , A	0	Q 2	50.03.1505		VN0808M	Q VN 0808 M, ZVN 0108 A, , A						
0	C 27	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 17	50.09.0119	TL062		IC TL 062 ACP , A	0	Q 3	50.03.1554		VP0808M	Q VP 0808 M , A						
0	C 28	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 18	50.63.0003	80C196		IC N 80C 196 KB - 12 , A	0	R 1	57.11.3104	100k		R 100 K , 1%, 0207 , MF						
0	C 29	59.22.5470	47u	C	47 U , -20%, 25V , EL	0	IC 19	50.17.7244	ACT244		IC .. 74 ACT 244 . , A	0	R 2	57.11.3103	10k		R 10 K , 1%, 0207 , MF						
0	C 30	59.22.5470	47u	C	47 U , -20%, 25V , EL	0	IC 20	50.07.0015	HEF4053B		IC .. 4053 .. , A	0	R 3	57.11.3103	10k		R 10 K , 1%, 0207 , MF						
0	C 31	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 21	50.17.1138	74HC138		IC ... 74 HC 138 .. , A	0	R 4	57.11.5475	4M7		R 4.7 M , 5%, 0207 , MF						
0	C 32	59.06.0222	2n2	C	2200 P , 10%, 63V , PETP	0	IC 22	50.17.7000	ACT00		IC .. 74 ACT 00 . , A	0	R 5	57.11.3102	1k		R 1 K , 1%, 0207 , MF						
0	C 33	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 23	50.17.7004	ACT04		IC .. 74 ACT 04 . , A	0	R 6	57.11.3103	10k		R 10 K , 1%, 0207 , MF						
0	C 34	59.22.2471	470u	C	470 U , -20%, 6.3V , EL	0	IC 24	50.17.7244	ACT244		IC .. 74 ACT 244 . , A	0	R 7	57.11.3103	10k		R 10 K , 1%, 0207 , MF						
0	C 35	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 25	50.17.1000	74HC00		IC ... 74 HC 00 .. , A	0	R 8	57.11.3272	2k7		R 2.7 K , 1%, 0207 , MF						
0	C 36	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 26	50.16.0153	82520		IC SAB 82520-P , A	0	R 9	57.11.3104	100k		R 100 K , 1%, 0207 , MF						
0	C 37	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 27	50.17.1133	74HC133		IC ... 74 HC 133 .. , A	0	R 10	57.11.5225	2M2		R 2.2 M , 5%, 0207 , MF						
0	C 38	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 28	50.17.1000	74HC00		IC ... 74 HC 00 .. , A	0	R 11	57.11.3242	2k4		R 2.4 K , 1%, 0207 , MF						
0	C 39	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 29	50.17.1000	74HC00		IC ... 74 HC 00 .. , A	0	R 12	57.11.3103	10k		R 10 K , 1%, 0207 , MF						
0	C 40	59.25.2470	47u	C	47 U , -10%, 10V , EL	0	IC 30	50.17.7032	ACT32		IC .. 74 ACT 32 . , A	0	R 13	57.11.3103	10k		R 10 K , 1%, 0207 , MF						
0	C 41	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 31	50.15.0104	MC3486		IC MC 3486 P, DS 3486 N, , A	0	R 14	57.11.3103	10k		R 10 K , 1%, 0207 , MF						
0	C 42	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 32	50.09.0119	TL062		IC TL 062 ACP , A	0	R 15	57.11.3242	2k4		R 2.4 K , 1%, 0207 , MF						
0	C 43	59.06.0222	2n2	C	2200 P , 10%, 63V , PETP	0	IC 33	50.09.0119	TL062		IC TL 062 ACP , A	0	R 16	57.11.5225	2M2		R 2.2 M , 5%, 0207 , MF						
0	C 44	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	IC 34	50.17.1151	74HC151		IC ... 74 HC 151 .. , A	0	R 17	57.11.3104	100k		R 100 K , 1%, 0207 , MF						
0	C 45	59.06.0222	2n2	C	2200 P , 10%, 63V , PETP	0	IC 35	50.17.1000	74HC00		IC ... 74 HC 00 .. , A	0	R 18	57.11.3103	10k		R 10 K , 1%, 0207 , MF						
0	C 46	59.06.0222	2n2	C	2200 P , 10%, 63V , PETP	0	J 1	54.01.0021			J BRUECKE 2 * 63	0	R 19	57.11.3272	2k7		R 2.7 K , 1%, 0207 , MF						
0	C 47	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	J 101	53.03.0218	1-P		XIC SINGLE, IN-LINE 1PIN=1STK	0	R 20	57.11.3103	10k		R 10 K , 1%, 0207 , MF						
0	C 48	59.06.0683	68n	C	.068 U , 10%, 63V , PETP	0	J 102	53.03.0218	1-P		XIC SINGLE, IN-LINE 1PIN=1STK	0	R 21	57.11.3751	750		R 750 , 1%, 0207 , MF						
0	C 49	59.34.4221	220p	C	220 P , 5%, N750 , CER	0	J 103	53.03.0218	1-P		XIC SINGLE, IN-LINE 1PIN=1STK	0	R 22	57.11.3221	220		R 220 , 1%, 0207 , MF						
0	C 50	59.34.4221	220p	C	220 P , 5%, N750 , CER	0	J 104	53.03.0218	1-P		XIC SINGLE, IN-LINE 1PIN=1STK	0	R 23	57.11.3103	10k		R 10 K , 1%, 0207 , MF						
0	D 1	50.04.0125	1N4448	D	1N 4448, SI	0	J 105	53.03.0218	1-P		XIC SINGLE, IN-LINE 1PIN=1STK	0	R 24	57.11.3223	22k		R 22 K , 1%, 0207 , MF						
0	D 2	50.04.0125	1N4448	D	1N 4448, SI	0	J 106	53.03.0218	1-P		XIC SINGLE, IN-LINE 1PIN=1STK	0	R 25	57.11.3223	22k		R 22 K , 1%, 0207 , MF						
0	D 3	50.04.0512	1N5818	D	1N 5818, 1N 5819, SI	0	J 107	53.03.0218	1-P		XIC SINGLE, IN-LINE 1PIN=1STK	0	R 26	57.11.3103	10k		R 10 K , 1%, 0207 , MF						
0	D 4	50.0																					



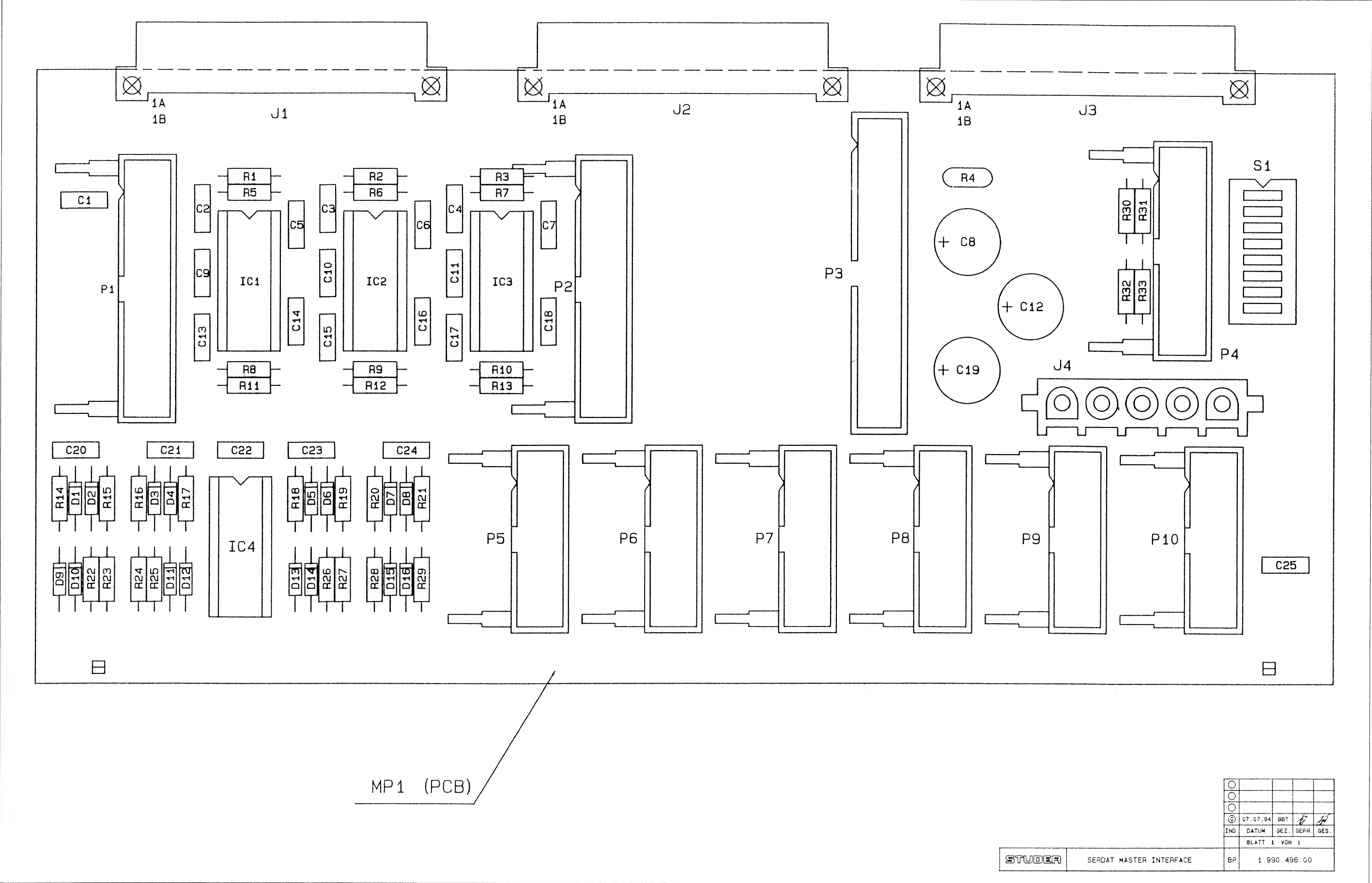
Serdat Master Interface I.990.496.00



## SECTION 5



Serdat Master Interface 1.990.496.00



## Serdat Master Interface 1.990.496.00

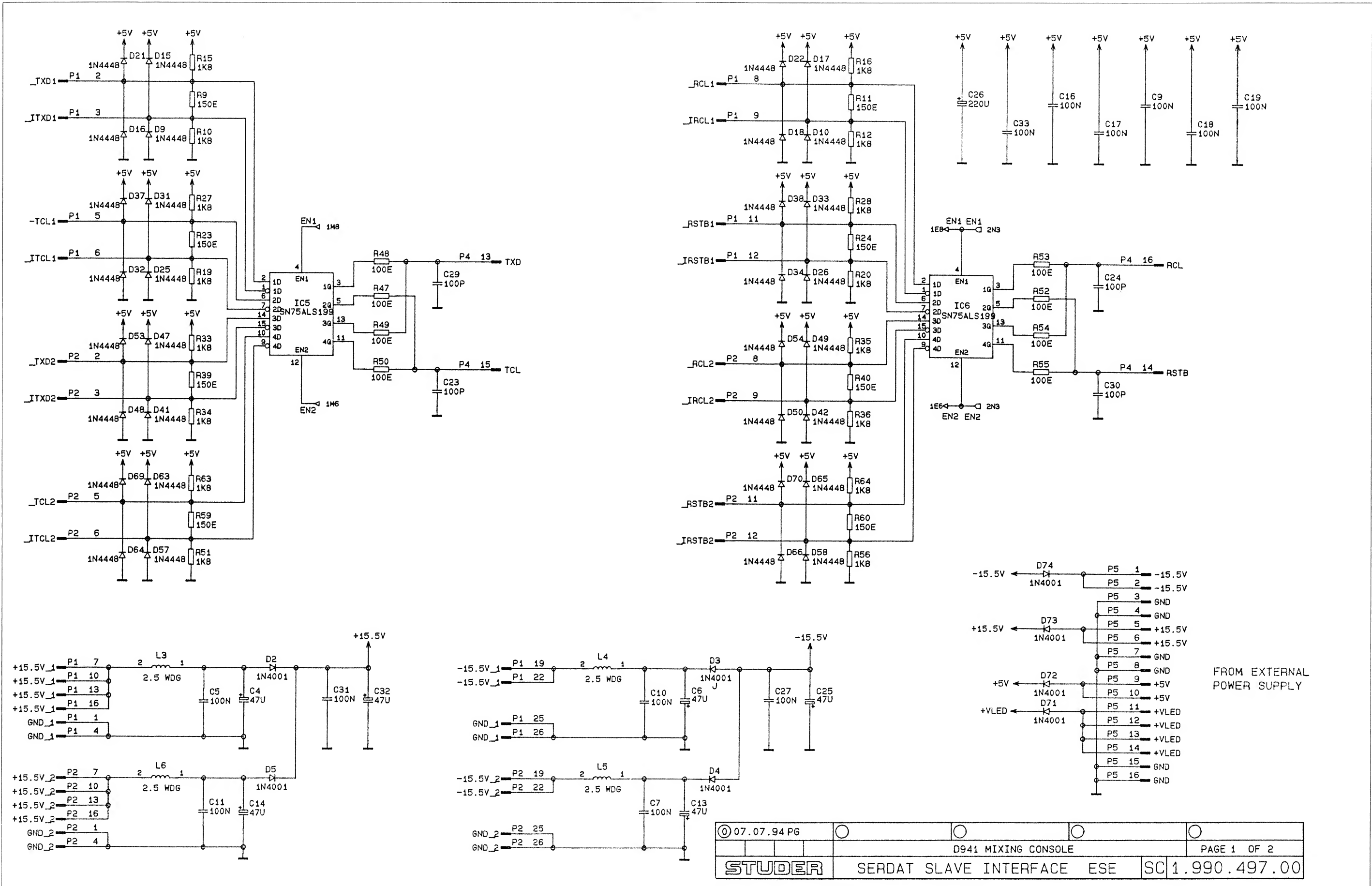
Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.06.0104		100n	PETP, 10%, 63V	0	R 19	57.11.3182		1k8	MF, 1%, 0207
0	C 2	...	0			0	R 20	57.11.3182		1k8	MF, 1%, 0207
0	C 3	...	0			0	R 21	57.11.3102		1k0	MF, 1%, 0207
0	C 4	...	0			0	R 22	57.11.3182		1k8	MF, 1%, 0207
0	C 5	...	0			0	R 23	57.11.3151		150R	MF, 1%, 0207
0	C 6	...	0			0	R 24	57.11.3151		150R	MF, 1%, 0207
0	C 7	...	0			0	R 25	57.11.3182		1k8	MF, 1%, 0207
0	C 8	59.22.4221		220u	EL 16V, 20%, rad RM5	0	R 26	57.11.3182		1k8	MF, 1%, 0207
0	C 9	59.06.0104		100n	PETP, 10%, 63V	0	R 27	57.11.3151		150R	MF, 1%, 0207
0	C 10	59.06.0104		100n	PETP, 10%, 63V	0	R 28	57.11.3151		150R	MF, 1%, 0207
0	C 11	59.06.0104		100n	PETP, 10%, 63V	0	R 29	57.11.3182		1k8	MF, 1%, 0207
0	C 12	59.22.4221		220u	EL 16V, 20%, rad RM5	0	R 30	57.11.3000		0R0	MF, 0207
0	C 13	...	0			0	R 31	57.11.3000		0R0	MF, 0207
0	C 14	...	0			0	R 32	57.11.3000		0R0	MF, 0207
0	C 15	...	0			0	R 33	57.11.3000		0R0	MF, 0207
0	C 16	...	0								
0	C 17	...	0			0	S 1	55.01.0168		8*a	SZ, 8*A, DIL
0	C 18	...	0								
0	C 19	59.22.4221		220u	EL 16V, 20%, rad RM5	0	XIC 1	53.03.0168		16p	DIL 0.3", lot, gerade
0	C 20	...	0			0	XIC 2	53.03.0168		16p	DIL 0.3", lot, gerade
0	C 21	...	0			0	XIC 3	53.03.0168		16p	DIL 0.3", lot, gerade
0	C 22	59.06.0104		100n	PETP, 10%, 63V	0	XIC 4	53.03.0168		16p	DIL 0.3", lot, gerade
0	C 23	...	0								
0	C 24	...	0								
0	C 25	59.06.0104		100n	PETP, 10%, 63V						
0	D 1	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	D 2	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	D 3	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	D 4	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	D 5	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	D 6	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	D 7	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	D 8	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	D 9	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	D 10	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	D 11	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	D 12	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	D 13	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	D 14	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	D 15	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	D 16	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35						
0	IC 1	50.15.0121		75174	IC SN 75174 N						
0	IC 2	50.15.0121		75174	IC SN 75174 N						
0	IC 3	50.15.0121		75174	IC SN 75174 N						
0	IC 4	50.15.0125		SN75ALS199	IC SN 75 ALS 199 N						
0	J 1	54.11.2038			J EU-QK 2 * 16						
0	J 2	54.11.2038			J EU-QK 2 * 16						
0	J 3	54.11.2038			J EU-QK 2 * 16						
0	J 4	54.25.0005		5p	J BUCHSE 5 POL 12 A AMP						
0	MP 1	1.990.496.11	1 mp		SERDAT MASTER IF PCB //A						
0	MP 2	1.990.496.04	1 mp		NR-ETIKETTE 5 * 20						
0	MP 3	28.99.0119	6 mp		ROHRNIETE D 2.5*0.15* 9						
0	P 1	54.14.2104		26p	P STECKER 26 P,AU,VR,GERADE						
0	P 2	54.14.2104		26p	P STECKER 26 P,AU,VR,GERADE						
0	P 3	54.14.2105		34p	P STECKER 34 P,AU,VR,GERADE						
0	P 4	54.14.2103		20p	P STECKER 20 P,AU,VR,GERADE						
0	P 5	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE						
0	P 6	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE						
0	P 7	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE						
0	P 8	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE						
0	P 9	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE						
0	P 10	54.14.2102		16p	P STECKER 16 P,AU,VR,GERADE						
0	R 1	57.11.3102		1k0	MF, 1%, 0207						
0	R 2	57.11.3102		1k0	MF, 1%, 0207						
0	R 3	57.11.3102		1k0	MF, 1%, 0207						
0	R 4	57.92.7013		0.5A	POLY- PTC, 60V						
0	R 5	57.11.3102		1k0	MF, 1%, 0207						
0	R 6	57.11.3102		1k0	MF, 1%, 0207						
0	R 7	57.11.3102		1k0	MF, 1%, 0207						
0	R 8	57.11.3102		1k0	MF, 1%, 0207						
0	R 9	57.11.3102		1k0	MF, 1%, 0207						
0	R 10	57.11.3102		1k0	MF, 1%, 0207						
0	R 11	57.11.3102		1k0	MF, 1%, 0207						
0	R 12	57.11.3102		1k0	MF, 1%, 0207						
0	R 13	57.11.3102		1k0	MF, 1%, 0207						
0	R 14	57.11.3102		1k0	MF, 1%, 0207						
0	R 15	57.11.3182		1k8	MF, 1%, 0207						
0	R 16	57.11.3182		1k8	MF, 1%, 0207						
0	R 17	57.11.3102		1k0	MF, 1%, 0207						
0	R 18	57.11.3102		1k0	MF, 1%, 0207						

End of List

Comments:

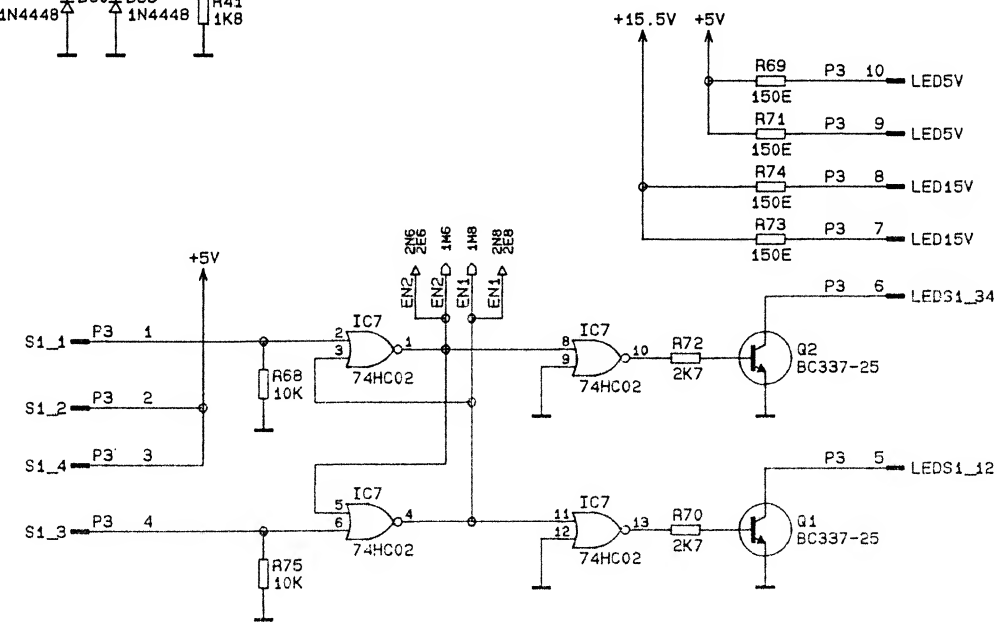
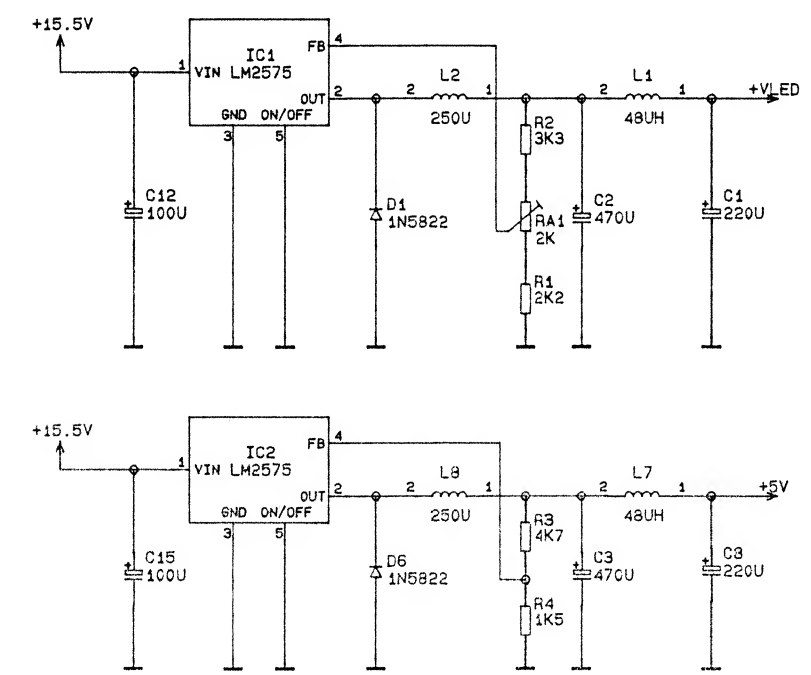
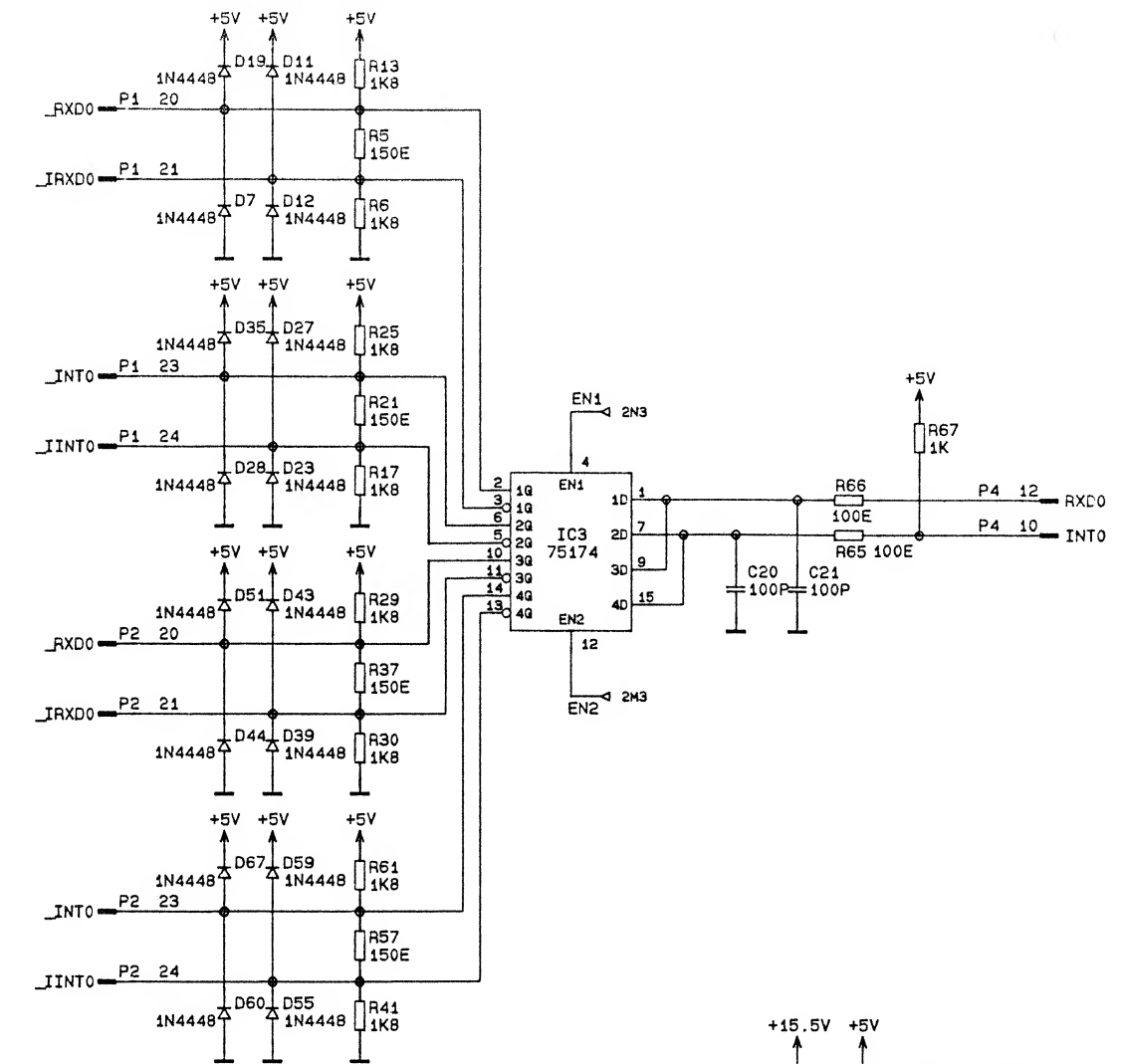
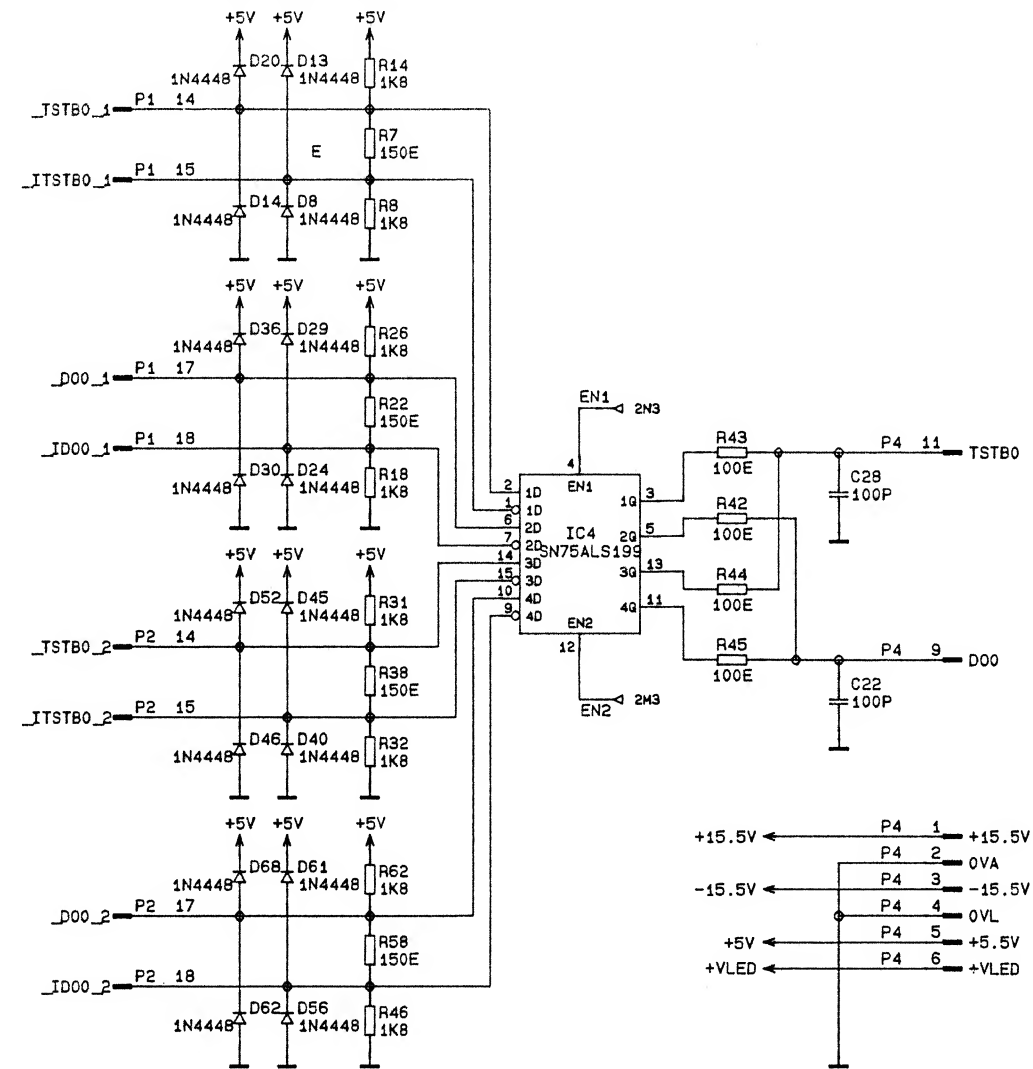


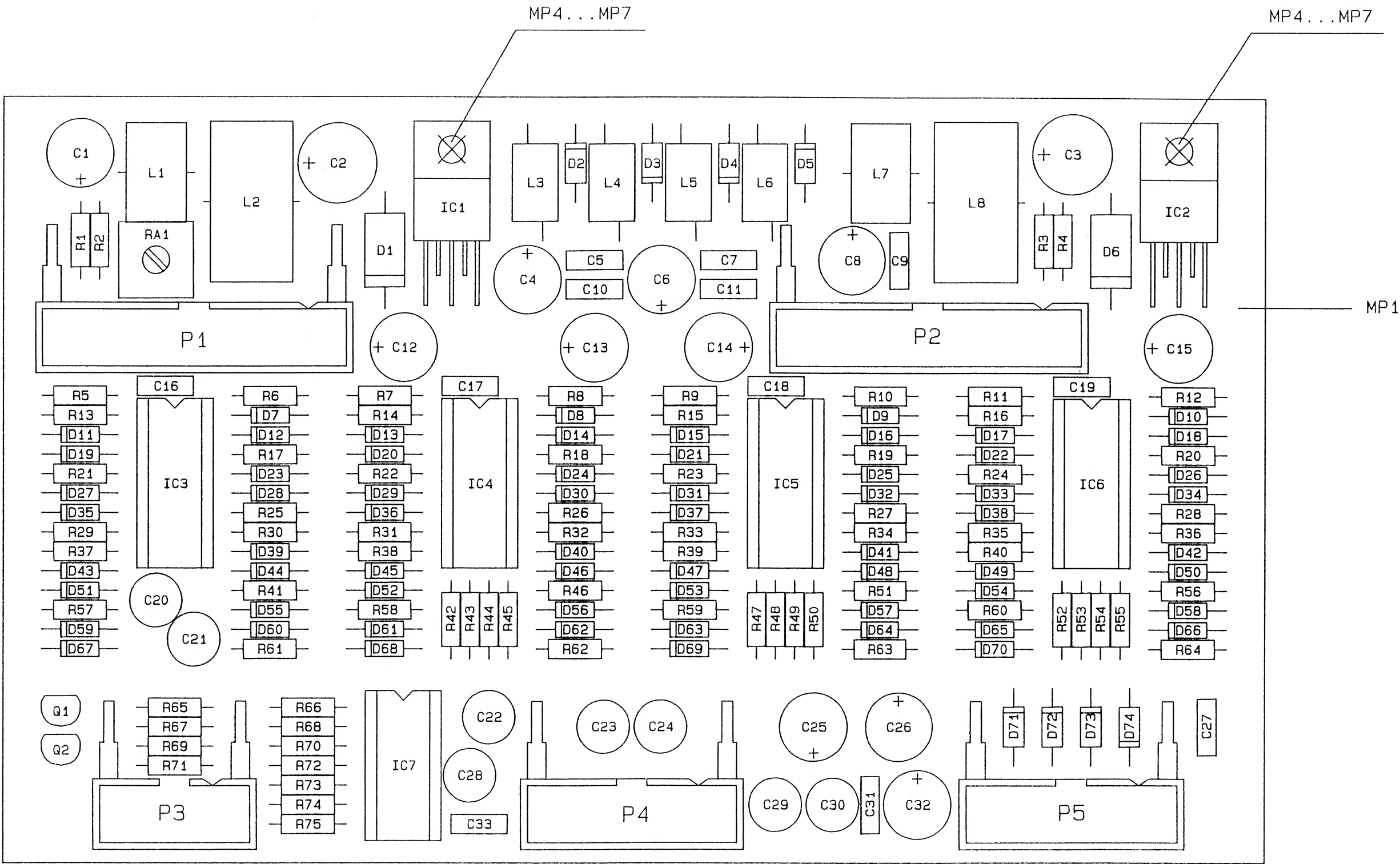
Serdat Slave Interface 1.990.497.00





Serdat Slave Interface 1.990.497.00





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①	07.07.94	BBT	<i>[Signature]</i>	<i>[Signature]</i>
IND.	DATUM	GEZ.	GEPR.	GES.
BLATT 1 VON 1				





Serdat Slave Interface I.990.497.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.22.3221	220u	EL	10V, 20%, RM5	0	D 53	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 30	57.11.3182	1k8	MF	1%, 0207	
0	C 2	59.22.4471	470u	EL	16V, 20%, RM5	0	D 54	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 31	57.11.3182	1k8	MF	1%, 0207	
0	C 3	59.22.4471	470u	EL	16V, 20%, RM5	0	D 55	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 32	57.11.3182	1k8	MF	1%, 0207	
0	C 4	59.22.6470	47u	EL	40V, 20%, RM5	0	D 56	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 33	57.11.3182	1k8	MF	1%, 0207	
0	C 5	59.06.0104	100n	PETP	63V, 10%, RM 5	0	D 57	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 34	57.11.3182	1k8	MF	1%, 0207	
0	C 6	59.22.6470	47u	EL	40V, 20%, RM5	0	D 58	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 35	57.11.3182	1k8	MF	1%, 0207	
0	C 7	59.06.0104	100n	PETP	63V, 10%, RM 5	0	D 59	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 36	57.11.3182	1k8	MF	1%, 0207	
0	C 8	59.22.3221	220u	EL	10V, 20%, RM5	0	D 60	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 37	not used				
0	C 9	59.06.0104	100n	PETP	63V, 10%, RM 5	0	D 61	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 38	57.11.3151	150R	MF	1%, 0207	
0	C 10	59.06.0104	100n	PETP	63V, 10%, RM 5	0	D 62	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 39	57.11.3151	150R	MF	1%, 0207	
0	C 11	59.06.0104	100n	PETP	63V, 10%, RM 5	0	D 63	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 40	57.11.3151	150R	MF	1%, 0207	
0	C 12	59.22.5101	100u	EL	25V, 20%, RM5	0	D 64	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 41	57.11.3182	1k8	MF	1%, 0207	
0	C 13	59.22.6470	47u	EL	40V, 20%, RM5	0	D 65	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 42	57.11.3101	100R	MF	1%, 0207	
0	C 14	59.22.6470	47u	EL	40V, 20%, RM5	0	D 66	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 43	57.11.3101	100R	MF	1%, 0207	
0	C 15	59.22.5101	100u	EL	25V, 20%, RM5	0	D 67	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 44	57.11.3101	100R	MF	1%, 0207	
0	C 16	59.06.0104	100n	PETP	63V, 10%, RM 5	0	D 68	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 45	57.11.3101	100R	MF	1%, 0207	
0	C 17	59.06.0104	100n	PETP	63V, 10%, RM 5	0	D 69	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 46	57.11.3182	1k8	MF	1%, 0207	
0	C 18	59.06.0104	100n	PETP	63V, 10%, RM 5	0	D 70	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 47	57.11.3101	100R	MF	1%, 0207	
0	C 19	59.06.0104	100n	PETP	63V, 10%, RM 5	0	D 71	50.04.0122	1N4001	1A, DO 41	0	R 48	57.11.3101	100R	MF	1%, 0207	
0	C 20	not used				0	D 72	50.04.0122	1N4001	1A, DO 41	0	R 49	57.11.3101	100R	MF	1%, 0207	
0	C 21	not used				0	D 73	50.04.0122	1N4001	1A, DO 41	0	R 50	57.11.3101	100R	MF	1%, 0207	
0	C 22	not used				0	D 74	50.04.0122	1N4001	1A, DO 41	0	R 51	57.11.3182	1k8	MF	1%, 0207	
0	C 23	not used									0	R 52	57.11.3101	100R	MF	1%, 0207	
0	C 24	not used				0	IC 1	50.10.0121	LM2575HV	5V, 1A Switching Reg	0	R 53	57.11.3101	100R	MF	1%, 0207	
0	C 25	59.22.6470	47u	EL	40V, 20%, RM5	0	IC 2	50.10.0121	LM2575HV	5V, 1A Switching Reg	0	R 54	57.11.3101	100R	MF	1%, 0207	
0	C 26	59.22.3221	220u	EL	10V, 20%, RM5	0	IC 3	50.15.0121	75174	IC SN 75174 N	0	R 55	57.11.3101	100R	MF	1%, 0207	
0	C 27	59.06.0104	100n	PETP	63V, 10%, RM 5	0	IC 4	50.15.0125	75ALS199	IC SN 75 ALS 199 N	0	R 56	57.11.3182	1k8	MF	1%, 0207	
0	C 28	not used				0	IC 5	50.15.0125	75ALS199	IC SN 75 ALS 199 N	0	R 57	not used				
0	C 29	not used				0	IC 6	50.15.0125	75ALS199	IC SN 75 ALS 199 N	0	R 58	57.11.3151	150R	MF	1%, 0207	
0	C 30	not used				0	IC 7	50.17.1002	74HC02	IC ... 74 HC 02 , A	0	R 59	57.11.3151	150R	MF	1%, 0207	
0	C 31	59.06.0104	100n	PETP	63V, 10%, RM 5						0	R 60	57.11.3151	150R	MF	1%, 0207	
0	C 32	59.22.6470	47u	EL	40V, 20%, RM5	0	L 1	62.03.0010	48uH	L 48 U , 2 A, FILTER	0	R 61	57.11.3182	1k8	MF	1%, 0207	
0	C 33	59.06.0104	100n	PETP	63V, 10%, RM 5	0	L 2	62.03.0025	250uH	L 250 U , 2 A, FILTER	0	R 62	57.11.3182	1k8	MF	1%, 0207	
						0	L 3	62.01.0115	2.5Wdg	L BREITBAND-	0	R 63	57.11.3182	1k8	MF	1%, 0207	
0	D 1	50.04.0519	1N5822	3A, Schottky		0	L 4	62.01.0115	2.5Wdg	L BREITBAND-	0	R 64	57.11.3182	1k8	MF	1%, 0207	
0	D 2	50.04.0122	1N4001	1A, DO 41		0	L 5	62.01.0115	2.5Wdg	L BREITBAND-	0	R 65	57.11.3101	100R	MF	1%, 0207	
0	D 3	50.04.0122	1N4001	1A, DO 41		0	L 6	62.01.0115	2.5Wdg	L BREITBAND-	0	R 66	57.11.3101	100R	MF	1%, 0207	
0	D 4	50.04.0122	1N4001	1A, DO 41		0	L 7	62.03.0010	48uH	L 48 U , 2 A, FILTER	0	R 67	57.11.3102	1k0	MF	1%, 0207	
0	D 5	50.04.0122	1N4001	1A, DO 41		0	L 8	62.03.0025	250uH	L 250 U , 2 A, FILTER	0	R 68	57.11.3103	10k	MF	1%, 0207	
0	D 6	50.04.0519	1N5822	3A, Schottky							0	R 69	57.11.3151	150R	MF	1%, 0207	
0	D 7	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	MP 1	1.990.497.11	1 pce		SERDAT SLAVE IF PCB //A	0	R 70	57.11.3272	2k7	MF	1%, 0207	
0	D 8	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	MP 2	1.990.497.04	1 pce		NR-ETIKETTE 5 * 20	0	R 71	57.11.3151	150R	MF	1%, 0207	
0	D 9	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	MP 3	43.01.0108	1 pce	Label	ESE-WARNSCHILD	0	R 72	57.11.3272	2k7	MF	1%, 0207	
0	D 10	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	MP 4	21.51.8354	2 pcs		LIN-SCHR. IS. NI , M 3 * 6	0	R 73	57.11.3151	150R	MF	1%, 0207	
0	D 11	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	MP 5	23.01.1032	2 pcs		U-SCHIEBE D 3.2/6 * 0.5	0	R 74	57.11.3151	150R	MF	1%, 0207	
0	D 12	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	MP 6	24.16.1030	2 pcs		RIPPENSCHIEBE D 3.2/5.5	0	R 75	57.11.3103	10k	MF	1%, 0207	
0	D 13	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	MP 7	22.01.5030	2 pcs		6KT-MUTTER 0.5 D , M 3							
0	D 14	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35							0	RA 1	58.01.8202	2k		Cermet, 10%, 0.5W, horizontal	
0	D 15	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	P 1	54.14.2104	26p		P STECKER 26 P,AU,VR,GERADE	0	XIC 3	53.03.0168	16p		DIL 0.3", lot, gerade	
0	D 16	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	P 2	54.14.2104	26p		P STECKER 26 P,AU,VR,GERADE	0	XIC 4	53.03.0168	16p		DIL 0.3", lot, gerade	
0	D 17	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	P 3	54.14.2101	10p		P STECKER 10 P,AU,VR,GERADE	0	XIC 5	53.03.0168	16p		DIL 0.3", lot, gerade	
0	D 18	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	P 4	54.14.2102	16p		P STECKER 16 P,AU,VR,GERADE	0	XIC 6	53.03.0168	16p		DIL 0.3", lot, gerade	
0	D 19	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	P 5	54.14.2102	16p		P STECKER 16 P,AU,VR,GERADE	0	XIC 7	53.03.0167	14p		DIL 0.3", lot, gerade	
0	D 20	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	D 21	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	Q 1	50.03.0340	BC337-25		800mA, 45V, NPN							
0	D 22	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	Q 2	50.03.0340	BC337-25		800mA, 45V, NPN							
0	D 23	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35													
0	D 24	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 1	57.11.3222	2k2		MF, 1%, 0207							
0	D 25	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 2	57.11.3332	3k3		MF, 1%, 0207							
0	D 26	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 3	57.11.3472	4k7		MF, 1%, 0207							
0	D 27	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 4	57.11.3152	1k5		MF, 1%, 0207							
0	D 28	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 5	not used										
0	D 29	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 6	57.11.3182	1k8		MF, 1%, 0207							
0	D 30	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 7	57.11.3151	150R		MF, 1%, 0207							
0	D 31	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 8	57.11.3182	1k8		MF, 1%, 0207							
0	D 32	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 9	57.11.3151	150R		MF, 1%, 0207							
0	D 33	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 10	57.11.3182	1k8		MF, 1%, 0207							
0	D 34	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 11	57.11.3151	150R		MF, 1%, 0207							
0	D 35	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 12	57.11.3182	1k8		MF, 1%, 0207							
0	D 36	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 13	57.11.3182	1k8		MF, 1%, 0207							
0	D 37	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 14	57.11.3182	1k8		MF, 1%, 0207							
0	D 38	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 15	57.11.3182	1k8		MF, 1%, 0207							
0	D 39	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 16	57.11.3182	1k8		MF, 1%, 0207							
0	D 40	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 17	57.11.3182	1k8		MF, 1%, 0207							
0	D 41	50.04.0125	1N4448	75V, 150mA, 4ns, DO-35	0	R 18	57.11.3182	1k8		MF, 1%, 0207							
0																	

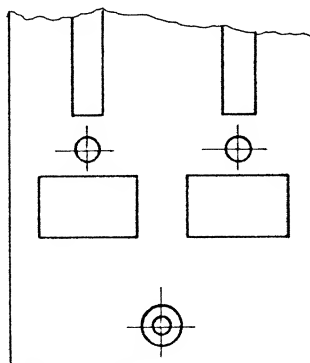
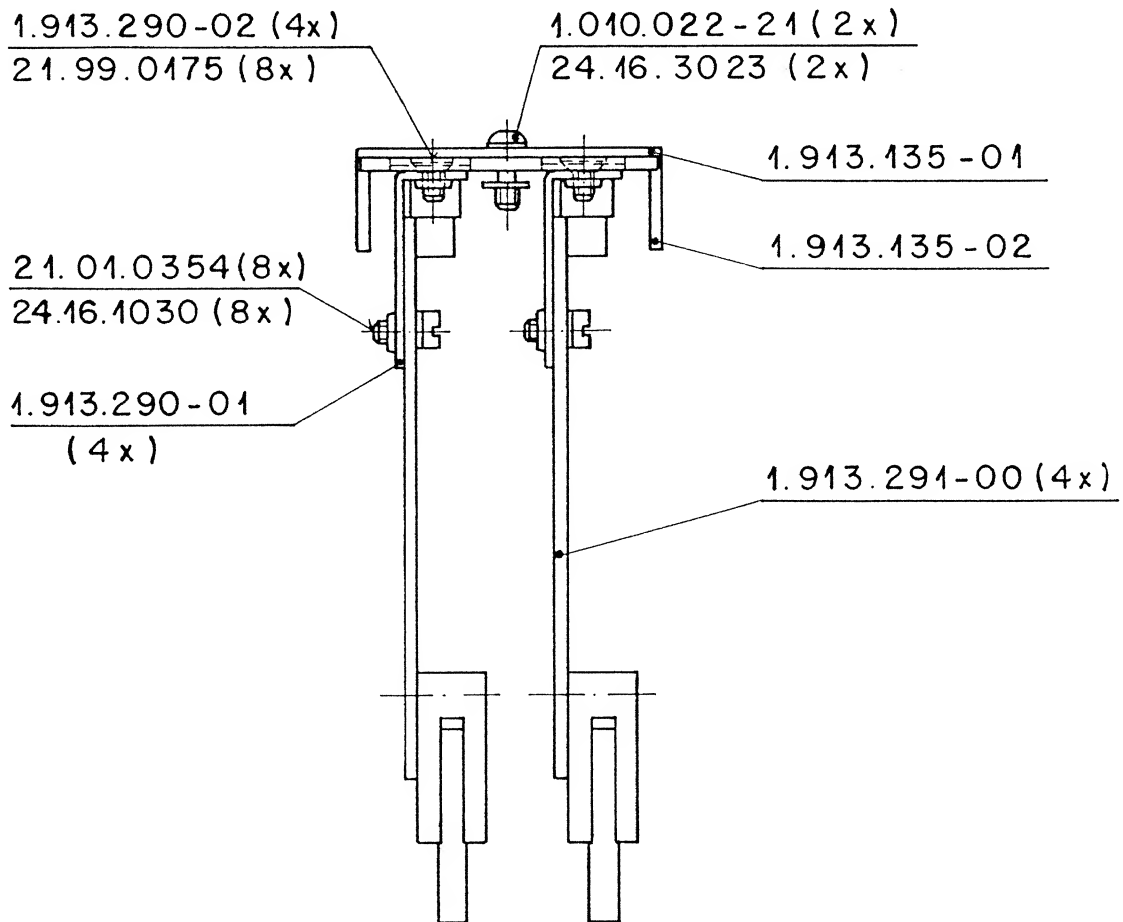
**SCHEMATA / CIRCUIT DIAGRAMS**

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**Meter Panel Units**

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Aux Indicator 4xLED .....	1.913.135.00
LED PPM Meter .....	1.913.291.00
PFL Amplifier .....	1.913.200.00
PFL Amplifier with Vol. + Headphone-Jack .....	1.913.202.00

**Aux Indicator 4x LED 1.913.135.00**

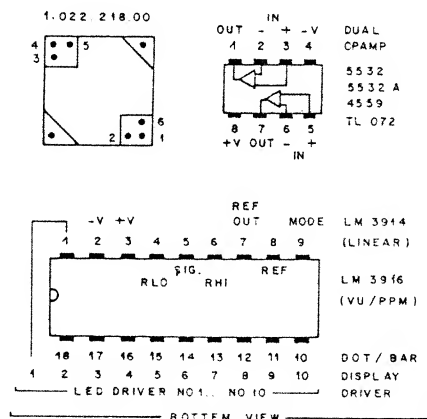
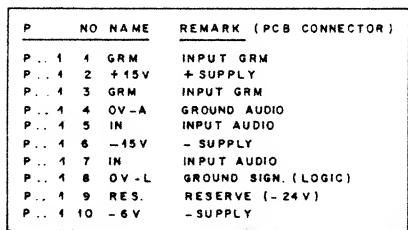
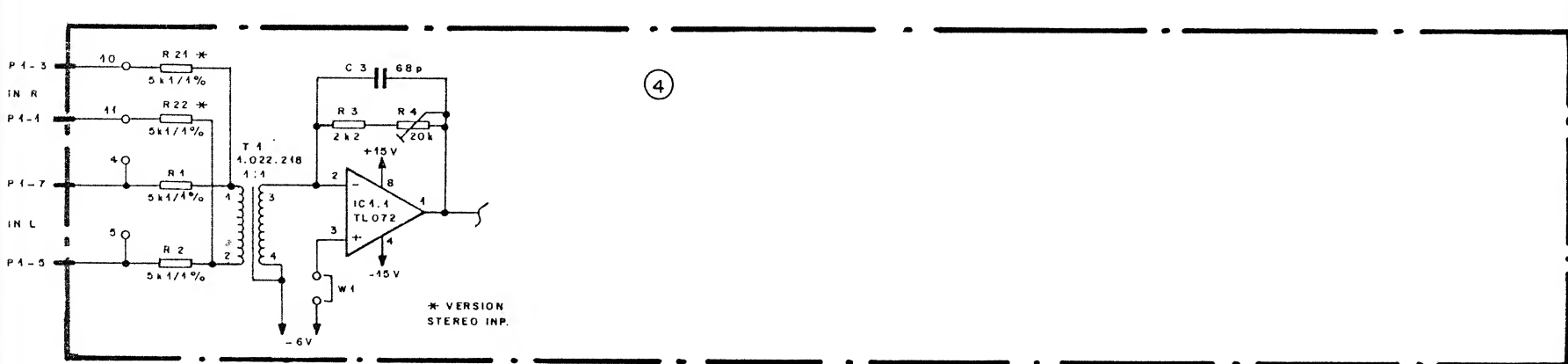
Änderung					③
					②
					①
Ausgabe	14.2.90	14.2.90			⑤
Datum	Gez	Gepr	Ges	Index	
Kopie für					
Nummer	1.913.135-00				

STUDER  
REGENSDORF  
ZÜRICH

Benennung

AUX INDICATOR 4x LED

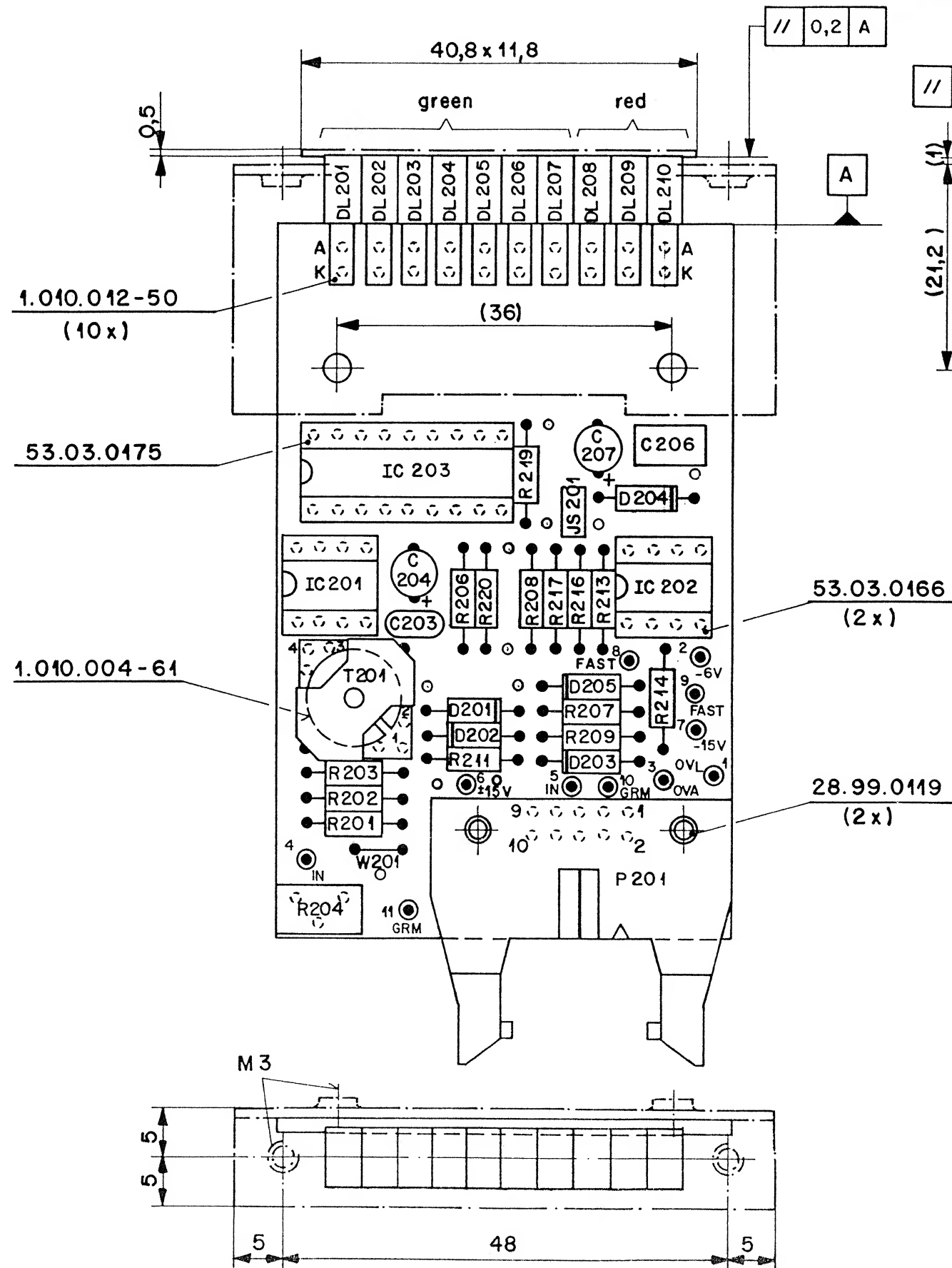
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0	16	9	92				
STUDER REGENSDORF ZÜRICH				AUX INDICATOR 4 x LED			SC 1.913.135



**LED PPM Meter 1.913.291.00**

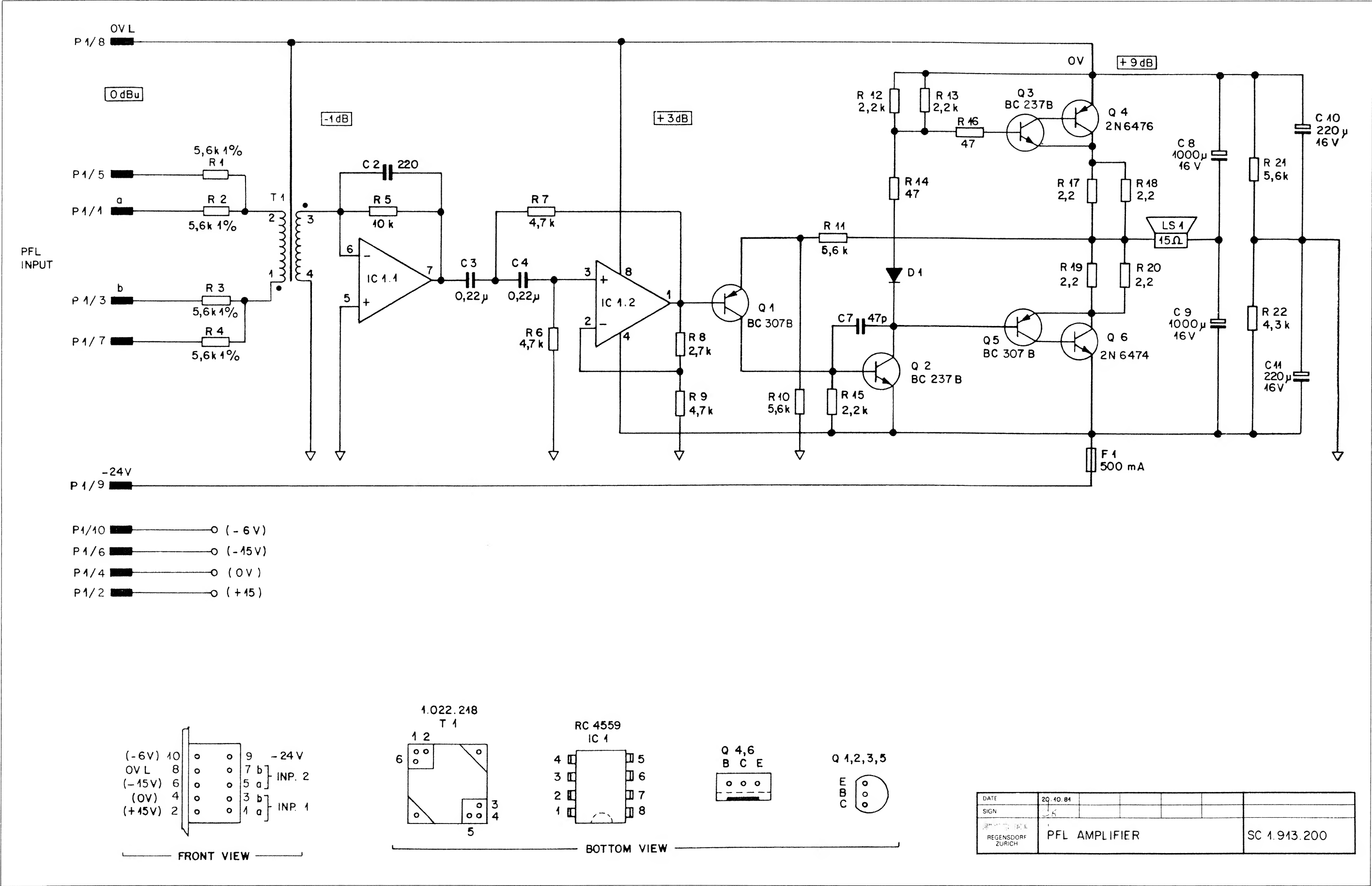


Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 201	not used	not used	not used	
0	C 202	not used	not used	not used	
0	C 203	59.34 2680	68p	CER 63V, 5%, N150	
0	C 204	59.22 3101	100u	EL 10V, 20%, RM5	
0	C 205	not used	not used	not used	
0	C 206	59.06 5474	470n	PETP, 63V, 5%, RM5	
0	C 207	59.22 3101	100u	EL 10V, 20%, RM5	
0	D 201	50.04 0125	1N4448	75V, 150mA, 4ns, DO-35	
0	D 202	50.04 0132	BAW62	D BAW 62	
1	D 203	50.04 0125	1N4448	75V, 150mA, 4ns, DO-35	
1	D 204	50.04 0125	1N4448	75V, 150mA, 4ns, DO-35	
1	D 205	50.04 0132	BAW62	D BAW 62	
0	D 206	not used	not used	not used	
0	DL 201	50.04 2146	MV54124A	DL MV 54124 A,	GN
0	DL 202	50.04 2146	MV54124A	DL MV 54124 A,	GN
0	DL 203	50.04 2146	MV54124A	DL MV 54124 A,	GN
0	DL 204	50.04 2146	MV54124A	DL MV 54124 A,	GN
0	DL 205	50.04 2146	MV54124A	DL MV 54124 A,	GN
0	DL 206	50.04 2146	MV54124A	DL MV 54124 A,	GN
0	DL 207	50.04 2146	MV54124A	DL MV 54124 A,	GN
0	DL 208	50.04 2119	MV57124A	DL MV 57124 A,	RT
0	DL 209	50.04 2119	MV57124A	DL MV 57124 A,	RT
0	DL 210	50.04 2119	MV57124A	DL MV 57124 A,	RT
0	IC 201	50.09 0101	TL072	IC TL 072 CN	,A
0	IC 202	50.09 0101	TL072	IC TL 072 CN	,A
0	IC 203	50.11 0144		IC LM 3916 N	
0	JP 201	54.01 0020	1p	Pin 0.63*0.63	
0	JP 202	54.01 0020	1p	Pin 0.63*0.63	
0	JS 201	54 01 0021	Jumper	0.63 * 0.63mm	
0	MP 201	1 913 290 11 1 pce		LED METER PCB	
0	MP 202	1 010 012 50 10 pcs		DIODENHALTER	
0	MP 203	28 99 0119 2 pcs		ROHRNIETE D 2.5*0.15* 9	
0	MP 204	not used	not used	not used	
0	MP 205	53.03 0166 2 pcs	8p	DIL 0.3", lot, gerade	
0	MP 206	53.03 0175 1 pce	18p	DIL 0.3", lot, gerade	
0	MP 207	54 02 0471 11 pcs		P STIFT D 1.5 * 5.5 LOET	
0	MP 208	1 010 004 61 1 pce		PSP-UNTERLAGE ZU SCHKE. R 5	
0	P 201	54.14 2011		P STECKER 10 P. AU, WINKEL	
0	R 201	57.11 3512	5k1	MF, 1%, 0207	
0	R 202	57.11 3512	5k1	MF, 1%, 0207	
0	R 203	57.11 4222		R 2.2 K , 2%, 0207 , MF	
0	R 204	58 01 9203	20k	Cermet, 10%, 0 5V, vertical	
0	R 205	not used	not used	not used	
				replaced by W 201	
0	R 206	57.11 4103		R 10 K , 2%, 0207 , MF	
0	R 207	57.11 4103		R 10 K , 2%, 0207 , MF	
0	R 208	57.11 3203	20k	MF, 1%, 0207	
0	R 209	57.11 4103		R 10 K , 2%, 0207 , MF	
0	R 210	not used	not used	not used	
0	R 211	57.11 3203	20k	MF, 1%, 0207	
0	R 212	not used	not used	not used	
				replaced by D 203	
0	R 213	57.11 4823		R 82 K , 2%, 0207 , MF	
0	R 214	57.11 4332		R 3.3 K , 2%, 0207 , MF	
0	R 215	not used	not used	not used	
				replaced by D 205	
0	R 216	57.11 6226	22M	MF, 10%, 0207	
0	R 217	57.11 4681		R 680 , 2%, 0207 , MF	
0	R 218	not used	not used	not used	
0	R 219	57.11 4222		R 2.2 K , 2%, 0207 , MF	
0	R 220	57.11 4222		R 2.2 K , 2%, 0207 , MF	
0	R 221	not used	not used	not used	
0	T 201	1.022 218 00		EINGANGSTRAFO 1 : 1	
0	W 201	1.010 321 64	Wire	DRAHTBRUECKE U. 4.3* 5.0, 0.6	

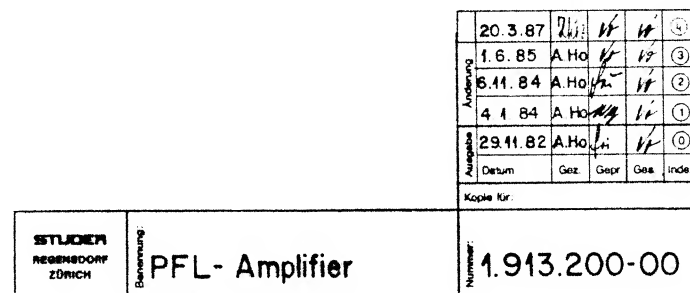
### Comments:

STUDER REGENSDORF ZÜRICH	Benennung:	LED PPM METER ESE	Number:	1.913.291-00
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PFL Amplifier 1.913.200.00



## SECTION 6

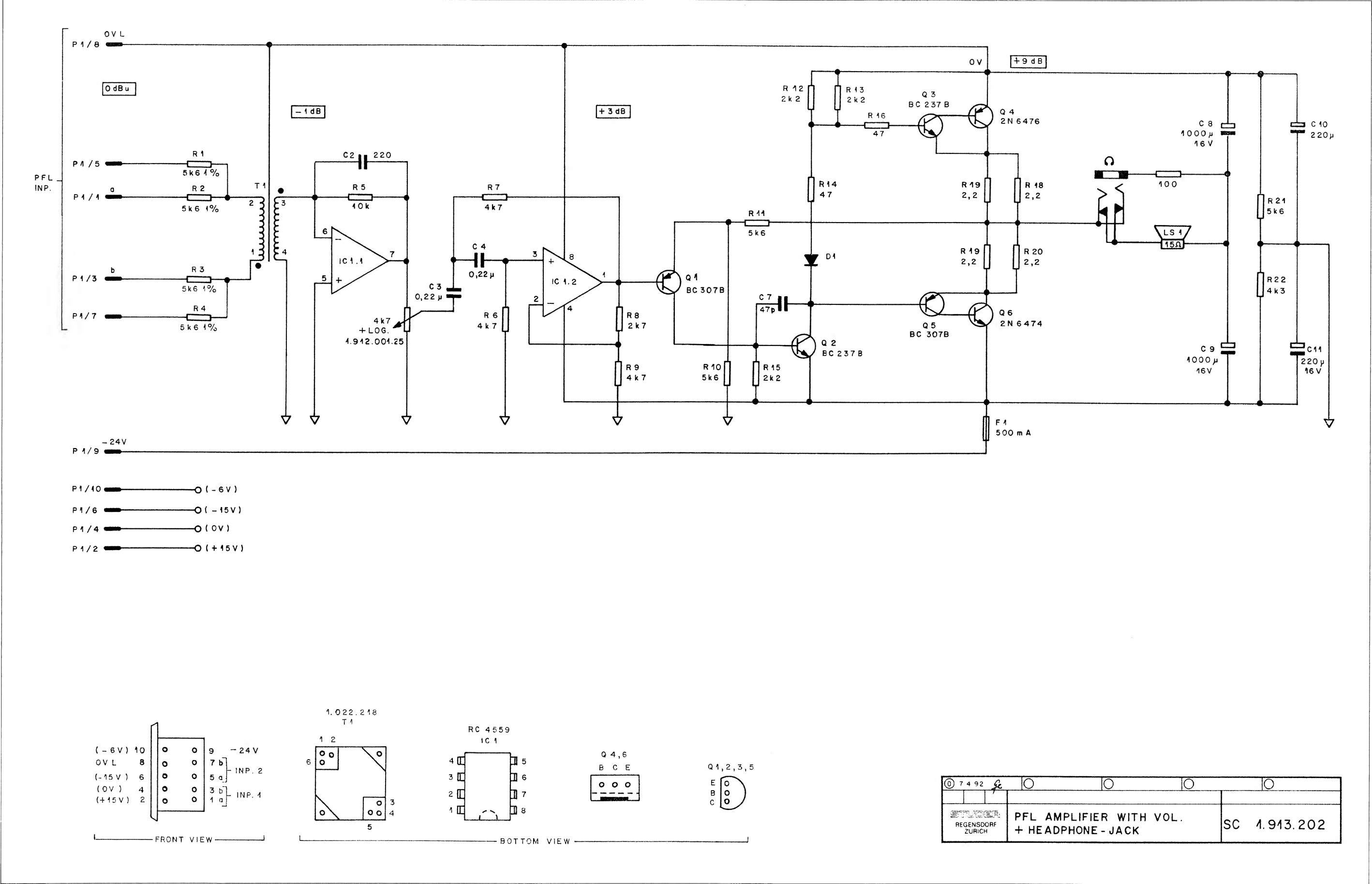


INDI	DATE	NAME	
④		CER - Ceramic	Ph - Philips
③		PE - Polyester	R - RCA
②		EL - Electrolytic	R - Raytheon
①	6.11.54	<i>1/2</i>	
①	14.8.81	<i>6/2</i>	
STUDER		AF - AMPLIFIER	1.913.200.00 PAGE 1 OF 2

IND	DATE	NAME		
(4)			ST- STUDER	
(3)				
(2)				
(1)				
○	14.8.81	St		
STUDER		PFL AMPLIFIER	1.913.200.00	PAGE 2 OF 2



PFL Amplifier with Vol. + Headphone - Jack 1.913.202.00



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**SCHEMATA / CIRCUIT DIAGRAMS**

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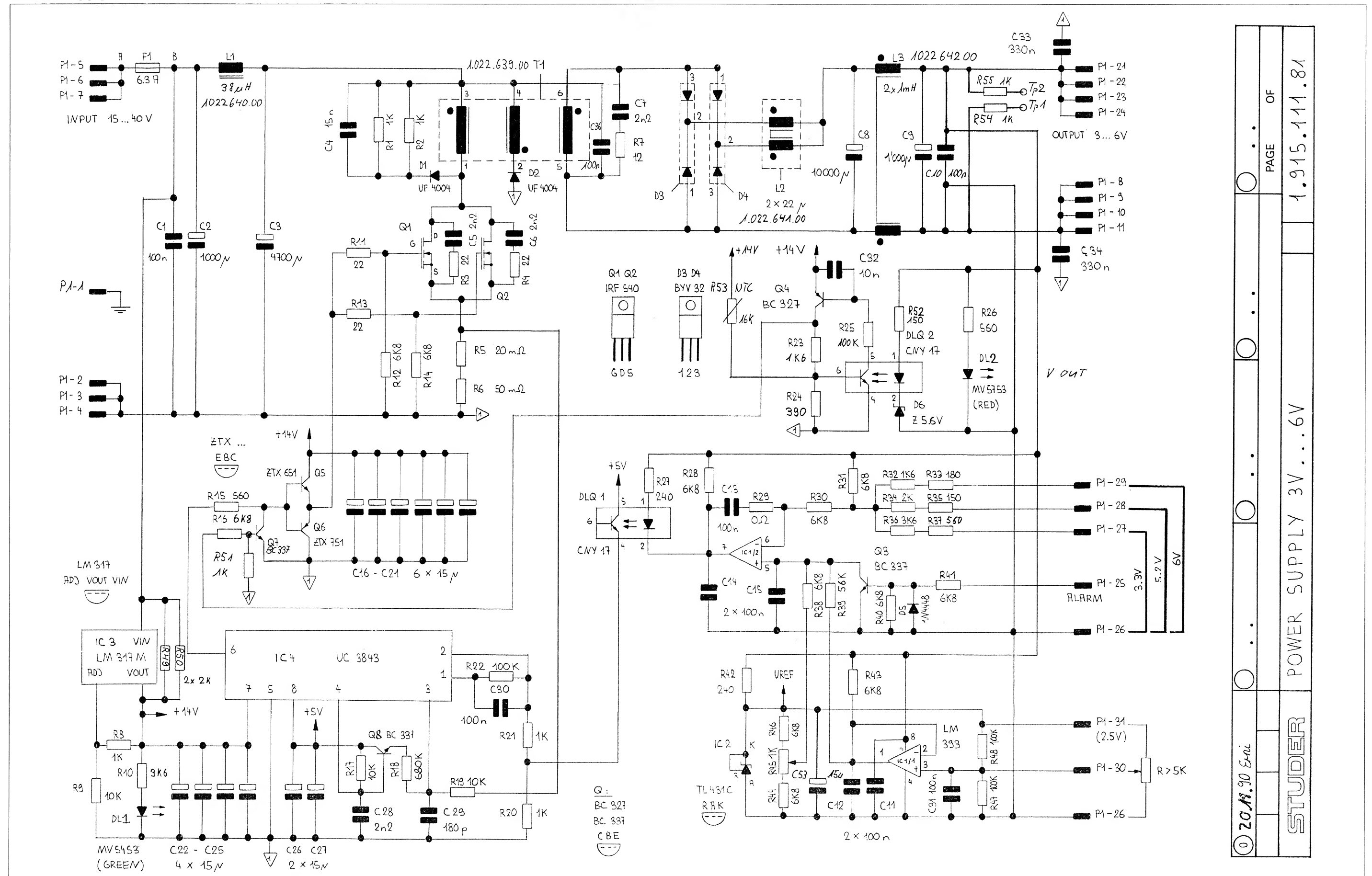
**Units of Eurocard Frame**

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Power Supply 3V...6V .....	1.915.111.81
4 Balancing Amplifier Gain 6 dB .....	1.915.914.00
CR + Studio Monitor Mix Amplifier .....	1.917.300.00
CR/Studio Monitor Amplifier .....	1.917.310.00
Subcard for CR/Studio Monitor .....	1.917.311.00
CR/Studio Monitor Amplifier/Out .....	1.917.312.00
Talk Back Amplifier .....	1.917.320.00
PFL/Talk Back Headphone Amplifier .....	1.917.330.81
Subcard for PFL Talk Back Headphone .....	1.917.331.00
Monitor Relays Unit 8x2/2 .....	1.917.601.00
Signal Input/Output Interface .....	1.917.611.00
Power Supply 5V/20A .....	1.940.601.00
Power Supply $\pm 15$ V/3.4A .....	1.940.602.00
Power Supply 24V/4.2A .....	1.940.603.00

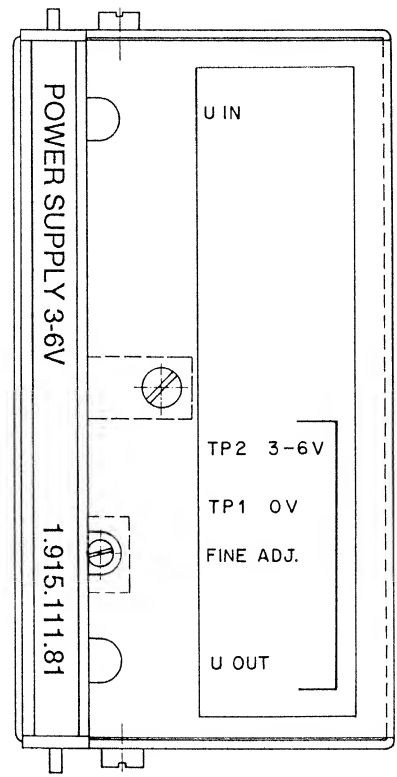
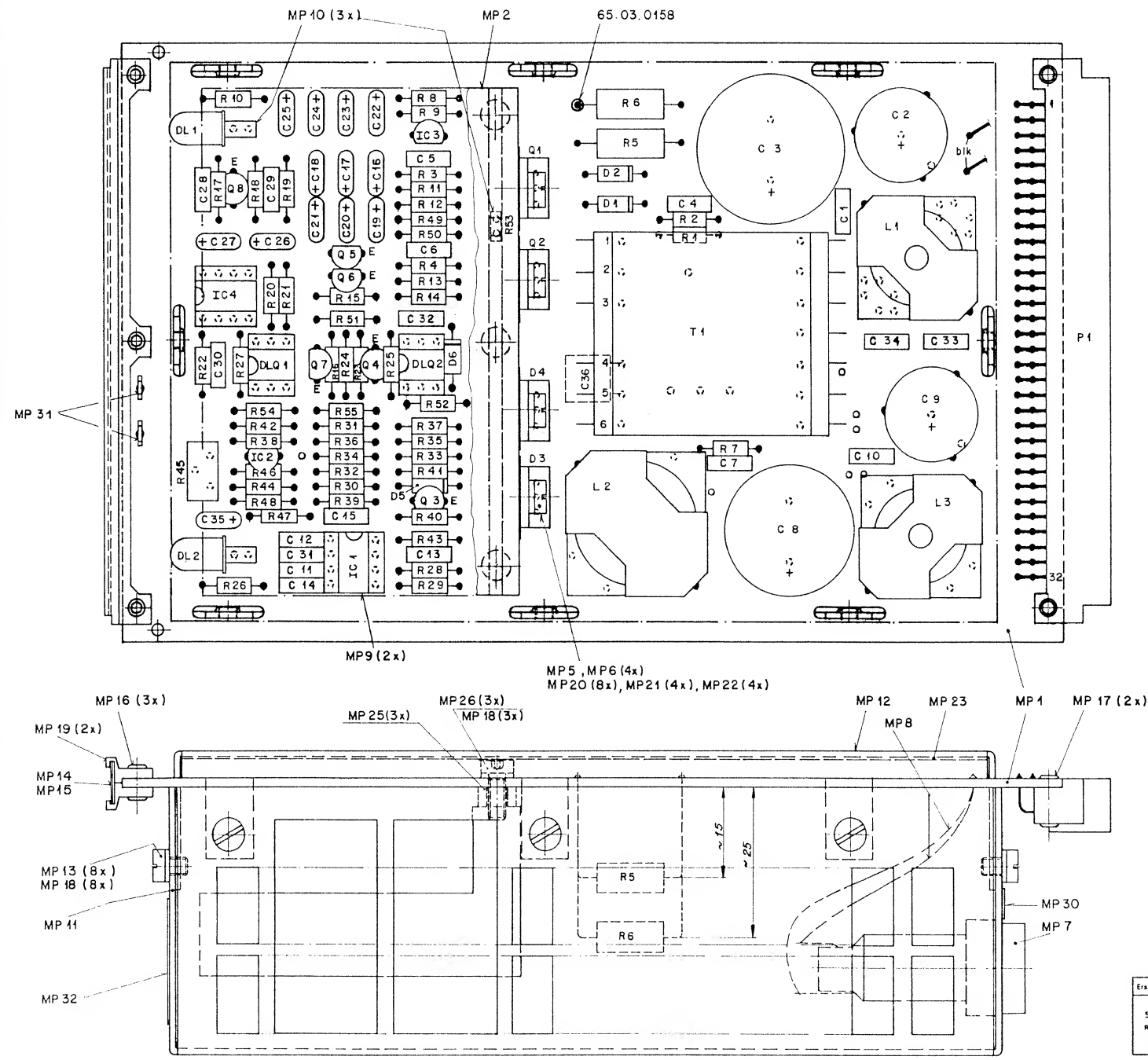


## Power Supply 3V...6V 1.915.111.81





Power Supply 3V...6V 1.915.111.81



Ersetzt für	Ersetzt durch	Kopie für
STUDER REGENSDORF ZÜRICH	POWER SUPPLY LED 3-6V ESE	1.915.111-81

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
C....1	59.06.0104	100 nF	PE	
C....2	59.22.6102	1000 uF	ALU 40V	
C....3	59.29.4472	4700 uF	EL 40V	
C....4	59.06.0153	15 nF	PE	
C....5	59.06.0222	2.2 nF	PE	
C....6	59.06.0222	2.2 nF	PE	
C....7	59.06.0222	2.2 nF	PE	
C....8	59.29.1103	10000 uF	EL 10V	
C....9	59.22.6102	1000 uF	ALU	
C....10	59.06.0104	100 nF	PE	
C....11	59.06.0104	100 nF	PE	
C....12	59.06.0104	100 nF	PE	
C....13	59.06.0104	100 nF	PE	
C....14	59.06.0104	100 nF	PE	
C....15	59.06.0104	100 nF	PE	
C....16	59.26.2150	15 uF	ALU 16V dry	
C....17	59.26.2150	15 uF	ALU 16V dry	
C....18	59.26.2150	15 uF	ALU 16V dry	
C....19	59.26.2150	15 uF	ALU 16V dry	
C....20	59.26.2150	15 uF	ALU 16V dry	
C....21	59.26.2150	15 uF	ALU 16V dry	
C....22	59.26.2150	15 uF	ALU 16V dry	
C....23	59.26.2150	15 uF	ALU 16V dry	
C....24	59.26.2150	15 uF	ALU 16V dry	
C....25	59.26.2150	15 uF	ALU 16V dry	
C....26	59.26.2150	15 uF	ALU 16V dry	
C....27	59.26.2150	15 uF	ALU 16V dry	
C....28	59.06.0222	2.2 nF	PE	
C....29	59.34.4181	180 pF	CER	
C....30	59.06.0104	100 nF	PE	
C....31	59.06.0104	100 nF	PE	
C....32	59.06.0103	10 nF	PE	
C....33	59.06.0334	330 nF	PE	
C....34	59.06.0334	330 nF	PE	
C....35	59.26.2150	15 uF	ALU 16V dry	
C....36	59.06.0104	100 nF	PE	
D....1	50.04.0138	UF4004		
D....2	50.04.0138	UF4004		
D....3	50.04.0517	BYJ 32	dual diode 2*10A	
D....4	50.04.0517	BYJ 32	dual diode 2*10A	
D....5	50.04.0125	1N4448		
D....6	50.04.1108	Z 5.6V		
DL....1	50.04.2113	MY5453	LED 5mm green	
DL....2	50.04.2111	MY5753	LED 5mm red	
DLQ....1	50.04.3200	CNY17	single optoisolator	GI
DLQ....2	50.04.3200	CNY17	single optoisolator	GI
F....1	51.01.0125	6.3A	fuse	
IC....1	50.05.0283	LM393	dual comparator	NS
IC....2	50.10.0106	TL431C	shunt voltage regulator	TI
IC....3	50.10.0108	LM317	series voltage regulator	NS
IC....4	50.10.0113	UC3843	current mode PWM controller	UN
L....1	1.022.640.00	38 uH	5A	STUDER
L....2	1.022.641.00	22 uH	dual coil 2*5A	STUDER
L....3	1.022.642.00	1.6 mH	dual coil 2*10A	STUDER
MP....1	1.915.111.12	1 pcs	Power Supply Led 3-6V PCB	STUDER
MP....2	50.20.3005	1 pcs	heat-sink black 1.8 K/W	
MP....3	0	not used		
MP....4	0	not used		
MP....5	50.20.0305	4 pcs	Glimmerscheibe	
MP....6	50.20.0404	4 pcs	Isolierdurchführung	
MP....7	53.03.0106	1 pcs	fuse holder 10A	
MP....8	1.915.111.93	1 pcs	LL Power Supply Led 3-6V	
MP....9	53.03.0166	2 pcs	IC-socket 8 pins	
MP....10	1.010.012.50	3 pcs	LED-clip (2LED INT)	
MP....11	1.915.111.01	1 pcs	Abdeckhaube Bestueckseite	STUDER
MP....12	1.915.111.02	1 pcs	Abdeckhaube Loetseite	STUDER
MP....13	21.53.0352	8 pcs	Z Schraube 1S M3*4 (Abdeckhaube)	
MP....14	1.915.111.04	1 pcs	Bez.Streifen 6.3*91	
MP....15	1.010.096.49	1 pcs	Klarsichtschild	
MP....16	28.21.1380	3 pcs	Rohrriete D2.25*6.5	
MP....17	28.99.0119	2 pcs	Rohrriete D 2.5*9	
MP....18	24.16.1030	11 pcs	Rippenscheibe M3	
MP....19	1.010.006.33	2 pcs	Griffhaefte	
MP....20	37.01.0101	8 pcs	Tellerfuder	
MP....21	21.01.0356	4 pcs	Z Schraube M3*10 (Halbleitem.)	
MP....22	1.010.098.27	4 pcs	Distanzhülse D 3.1/7*2.3	
MP....23	1.915.111.03	1 pcs	Isolation 138*89 selbstklebend	
MP....25	1.010.088.27	3 pcs	Distanzhülse D 3.2/7 * 35	
MP....26	21.53.0357	3 pcs	Z-Schraube M3*12	
MP....27	0	not used		
MP....28	65.03.0158	23 mm	Isolierschlauch (R6)	
MP....30	1.010.123.51	1 pcs	Text-Etikette 5*20 (T 6.3A)	
MP....31	54.02.0320	2 pcs	Flachstecker (Tp1 Tp2)	
MP....32	1.915.111.05	1 pcs	Klebschild (Poti Led Tp)	
P....1	54.11.2004	32 pins	Eurocard connector	
Q....1	50.03.1509	IRF 540	power MOS-FET	GE
Q....2	50.03.1509	IRF 540	power MOS-FET	GE
Q....3	50.03.0340	BC 337	NPN standard	
Q....4	50.03.0351	BC 327	PNP standard	
Q....5	50.03.0523	ZTX 651	NPN 2A	
Q....6	50.03.0352	ZTX 751	PNP 2A	
Q....7	50.03.0340	BC 337	NPN standard	



## Power Supply 3V...6V 1.915.111.81

Ad ..POS.. ...REF.No... DESCRIPTION.....MANUFACTURER

Q.....8 50.03.0340 BC 337 NPN standard

R.....1 57.11.3102 1 kOhm  
 R.....2 57.11.3102 1 kOhm  
 R.....3 57.11.3220 22 Ohm  
 R.....4 57.11.3220 22 Ohm  
 R.....5 57.56.2020 20 mOhm 3W small L (10nH)  
 R.....6 57.56.2050 50 mOhm 3W small L (10nH)  
 R.....7 57.11.3120 12 Ohm  
 R.....8 57.11.3102 1 kOhm 5%  
 R.....9 57.11.3103 10 kOhm 5%  
 R.....10 57.11.3362 3.6 kOhm

R.....11 57.11.3220 22 Ohm  
 R.....12 57.11.3682 6.8 kOhm  
 R.....13 57.11.3220 22 Ohm  
 R.....14 57.11.3682 6.8 kOhm  
 R.....15 57.11.3561 560 Ohm  
 R.....16 57.11.3682 6.8 kOhm  
 R.....17 57.11.3103 10 kOhm 5%  
 R.....18 57.11.3684 680 kOhm 5%  
 R.....19 57.11.3103 10 kOhm  
 R.....20 57.11.3102 1 kOhm

R.....21 57.11.3102 1 kOhm  
 R.....22 57.11.3104 100 kOhm  
 R.....23 57.11.3162 1.6 kOhm  
 R.....24 57.11.3391 390 Ohm  
 R.....25 57.11.3104 100 kOhm  
 R.....26 57.11.3561 560 Ohm  
 R.....27 57.11.3241 240 Ohm  
 R.....28 57.11.3682 6.8 kOhm  
 R.....29 57.11.3000 0 Ohm  
 R.....30 57.11.3682 6.8 kOhm

R.....31 57.11.3682 6.8 kOhm 1%  
 R.....32 57.11.3162 1.6 kOhm 1%  
 R.....33 57.11.3181 180 Ohm 1%  
 R.....34 57.11.3202 2 kOhm 1%  
 R.....35 57.11.3151 150 Ohm 1%  
 R.....36 57.11.3362 3.6 kOhm 1%  
 R.....37 57.11.3561 560 Ohm 1%  
 R.....38 57.11.3682 6.8 kOhm 1%  
 R.....39 57.11.3563 56 kOhm 1%  
 R.....40 57.11.3682 6.8 kOhm

R.....41 57.11.3682 6.8 kOhm  
 R.....42 57.11.3241 240 Ohm  
 R.....43 57.11.3682 6.8 kOhm  
 R.....44 57.11.3682 6.8 kOhm 1%  
 R.....45 58.01.9102 1 kOhm trimmer  
 R.....46 57.11.3682 6.8 kOhm 1%  
 R.....47 57.11.3104 100 kOhm 1%  
 R.....48 57.11.3104 100 kOhm 1%  
 R.....49 57.11.3202 2 kOhm  
 R.....50 57.11.3202 2 kOhm

R.....51 57.11.3102 1 kOhm  
 R.....52 57.11.3151 150 Ohm  
 R.....53 57.99.0220 16 kOhm NTC  
 R.....54 57.11.3102 1 kOhm  
 R.....55 57.11.3102 1 kOhm

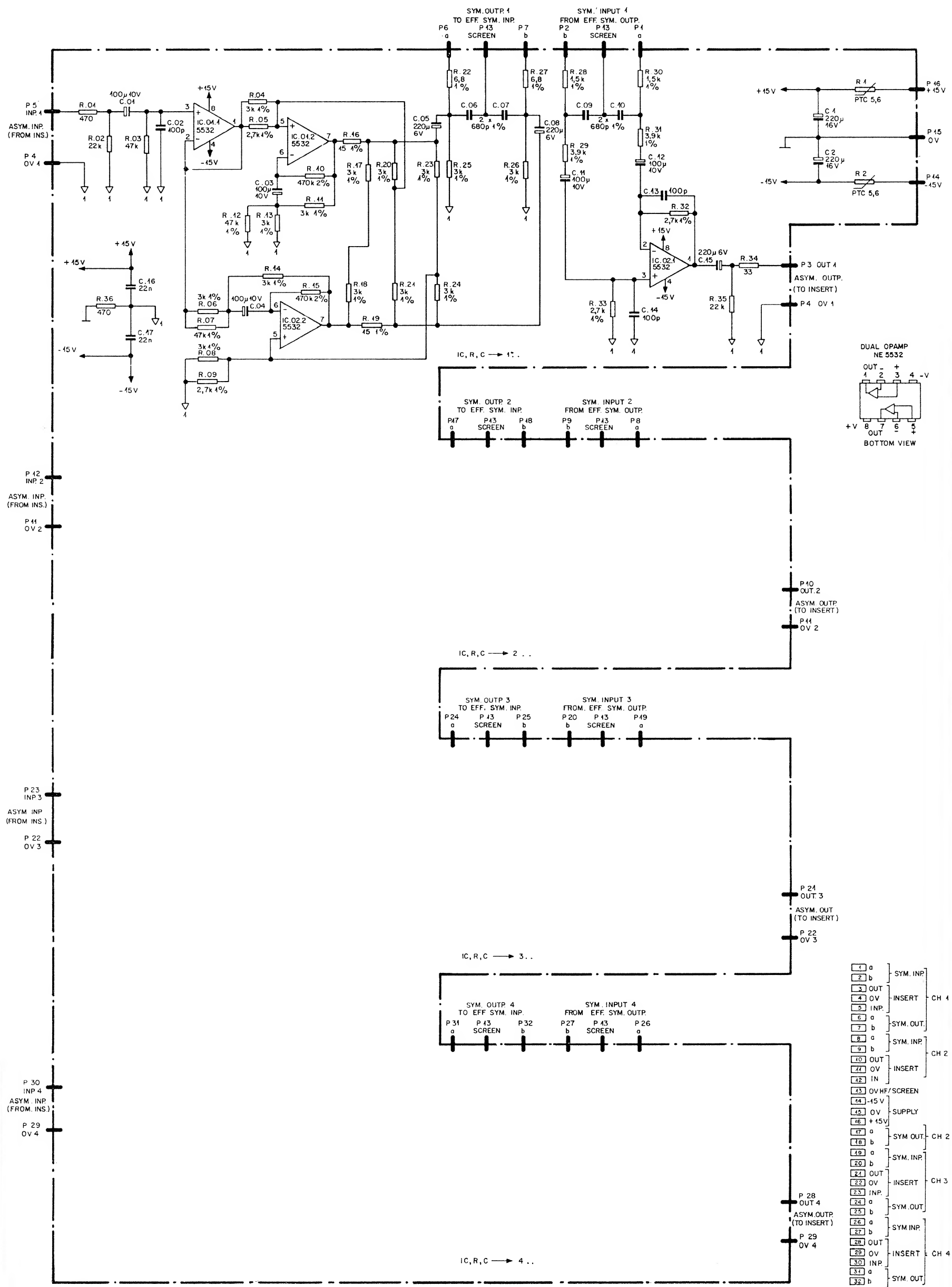
T.....1 1.022.639.00 Schalttrafo Power Supply 3 - 6V STUDER

PE=Polyester, EL=Electrolytic, ALU=Aluminium, CER=Ceramic

MANUFACTURER: NS=National Semiconductors, TI=Texas Instrument  
 GI=General Instruments, UN=Unitrod,  
 GE=General Electric,

1.915.111.81 POWER SUPPLY LED 3-6V SE 92/01/2400

## 4 Balancing Amplifier Gain 6dB 1.915.914.00



DATE	22.11.82				
SIGN.	<i>M. 2.83</i>				
STUDER REGENSDORF ZÜRICH	4 BALANCING AMP. GAIN 6dB				SC 1.915.914

4 Balancing Amplifier Gain 6dB 1.915.914.00

28.21.1380

1.010.127-65 (2x)

53.03.0166

1.010.006-33

1.010.090-49

1.010.096-49

1.915.914-01

24.01.0280 (2x)

24.16.1025 (2x)

1.915.914-41

24.01.0281 (2x)

24.16.1025 (2x)

54.01.0359

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
C...	1	59.22.4221	220µ 16V	EL
C...	2	59.22.4221	220µ 16V	EL
<div>CH1 ELEMENT 100...199 CH2 ELEMENT 200...299 CH3 ELEMENT 300...399 CH4 ELEMENT 400...499</div>				
C...	1	59.22.3101	100µ 10V	EL
C...	2	59.34.2101	100p	CER
C...	3	59.22.3101	100µ 10V	EL
C...	4	59.22.3101	100µ 10V	EL
C...	5	59.22.2221	220µ 6V	EL
C...	6	59.05.1681	680p 1%	PP
C...	7	59.05.1681	680p 1%	PP
C...	8	59.22.2221	220µ 6V	EL
C...	9	59.05.1681	680p 1%	PP
C...	10	59.05.1681	680p 1%	PP
C...	11	59.22.3101	100µ 10V	EL
C...	12	59.22.3101	100µ 10V	EL
C...	13	59.34.2101	100p 2%	CER
C...	14	59.34.2101	100p 2%	CER
C...	15	59.22.2221	220µ 6V	EL
C...	16	59.06.0223	0,022µ	PE
C...	17	59.06.0223	0,022µ	PE
IC...	1	50.09.0106	NE5532	LOW NOISE OP AMP
IC...	2	50.09.0106	NE5532	LOW NOISE OP AMP
R...	1	57.99.0209	5,6k	PTC
R...	2	57.99.0209	5,6k	PTC
R...	1	57.11.4471	470	
R...	2	57.11.4223	22k	
R...	3	57.11.3473	47k	
R...	4	57.11.3302	3k 1%	
R...	5	57.11.3272	2,7k 1%	
R...	6	57.11.3302	3k 1%	
R...	7	57.11.3473	47k 1%	
R...	8	57.11.3302	3k 1%	
R...	9	57.11.3272	2,7k 1%	
R...	10	57.11.4474	470k 2%	
R...	11	57.11.3302	3k 1%	
R...	12	57.11.3473	47k 1%	
R...	13	57.11.3302	3k 1%	
R...	14	57.11.3302	3k 1%	
R...	15	57.11.4474	470k 2%	
R...	16	57.11.3150	15 1%	
R...	17	57.11.3302	3k 1%	
R...	18	57.11.3302	3k 1%	
R...	19	57.11.3150	15 1%	
R...	20	57.11.3302	3k 1%	
R...	21	57.11.3302	3k 1%	
R...	22	57.11.3689	6,8k 1%	
R...	23	57.11.3302	3k 1%	
R...	24	57.11.3302	3k 1%	
R...	25	57.11.3302	3k 1%	
R...	26	57.11.3302	3k 1%	
R...	27	57.11.3689	6,8k 1%	
R...	28	57.11.3152	1,5k 1%	
R...	29	57.11.3392	3,9k 1%	
R...	30	57.11.3152	1,5k 1%	
R...	31	57.11.3392	3,9k 1%	
R...	32	57.11.3272	2,7k 1%	
R...	33	57.11.3272	2,7k 1%	
R...	34	57.11.4330	33k 2%	
R...	35	57.11.4223	22k	
R...	36	57.11.4471	470	

Resistors metallfilm

EL=Electrolytic, PE=Polyester, PP=Polypropylen, CER=Ceramic

MANUFACTURER: SIG=Signetics, TI=Texas Instruments, RA=Raytheon

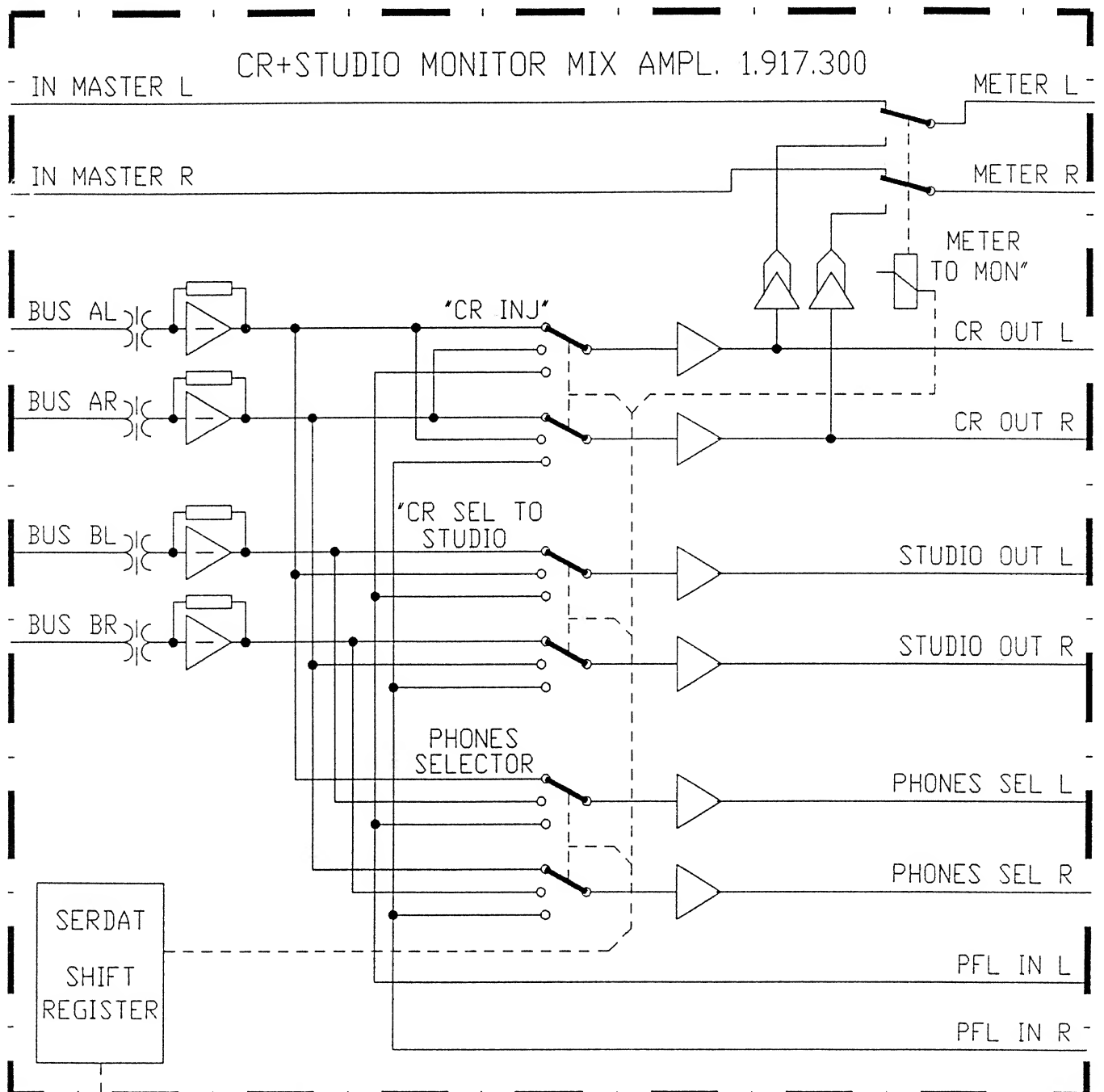
1.915.914.00 4 BAL. AMPLIFIER 6dB

FRI 05/10/82

END

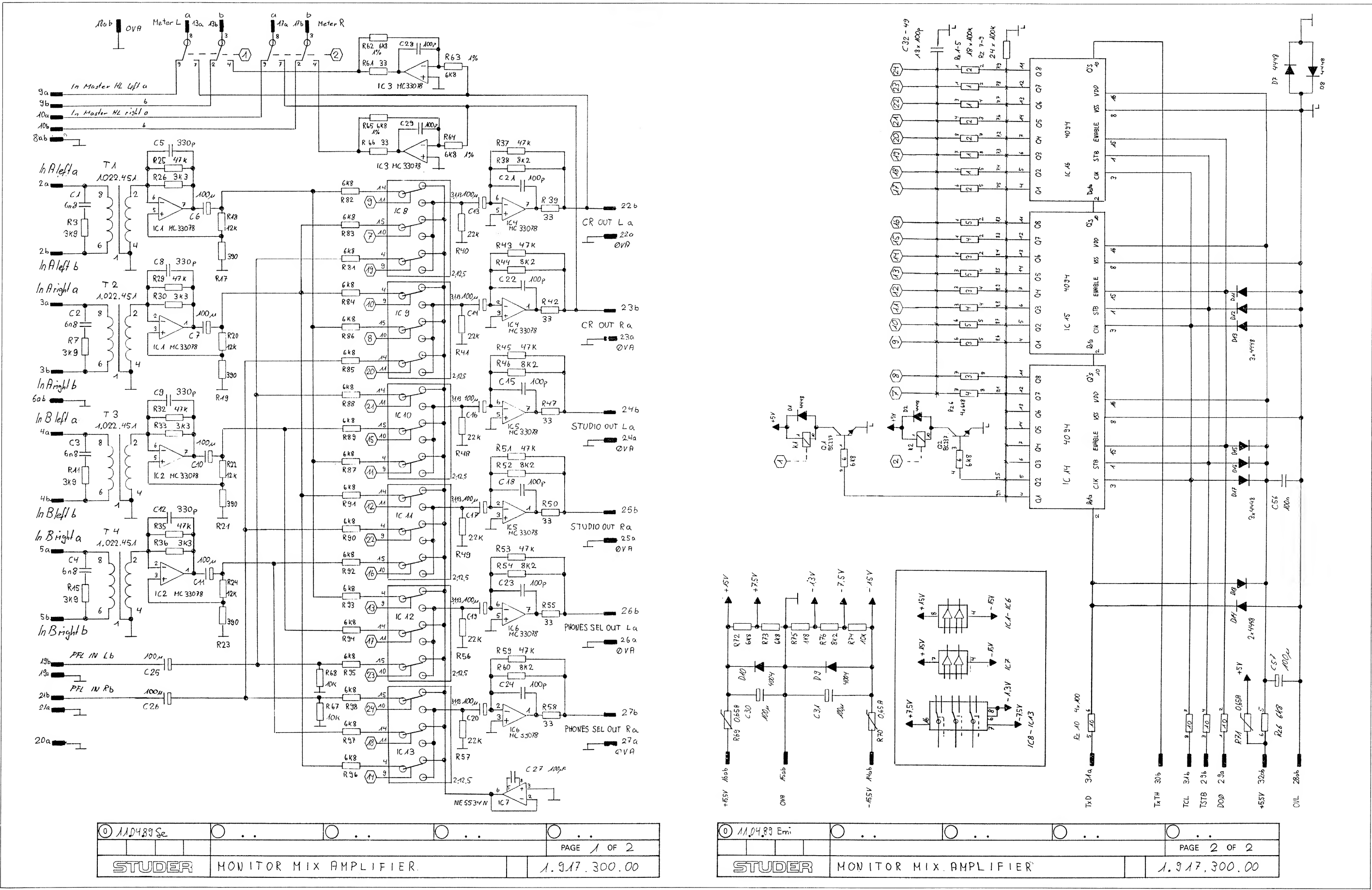
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Ausgabe	4.4.84	Si					
Datum	27.10.82	A.Ho					
Gez							
Gepr							
Ges							
Index							
Kopie für							
STUDER REGENSDORF ZÜRICH							
4 Bal. Amplifier 6 DB							
1.915.914-00							



**CR + Studio Monitor Mix Amplifier 1.917.300.00**

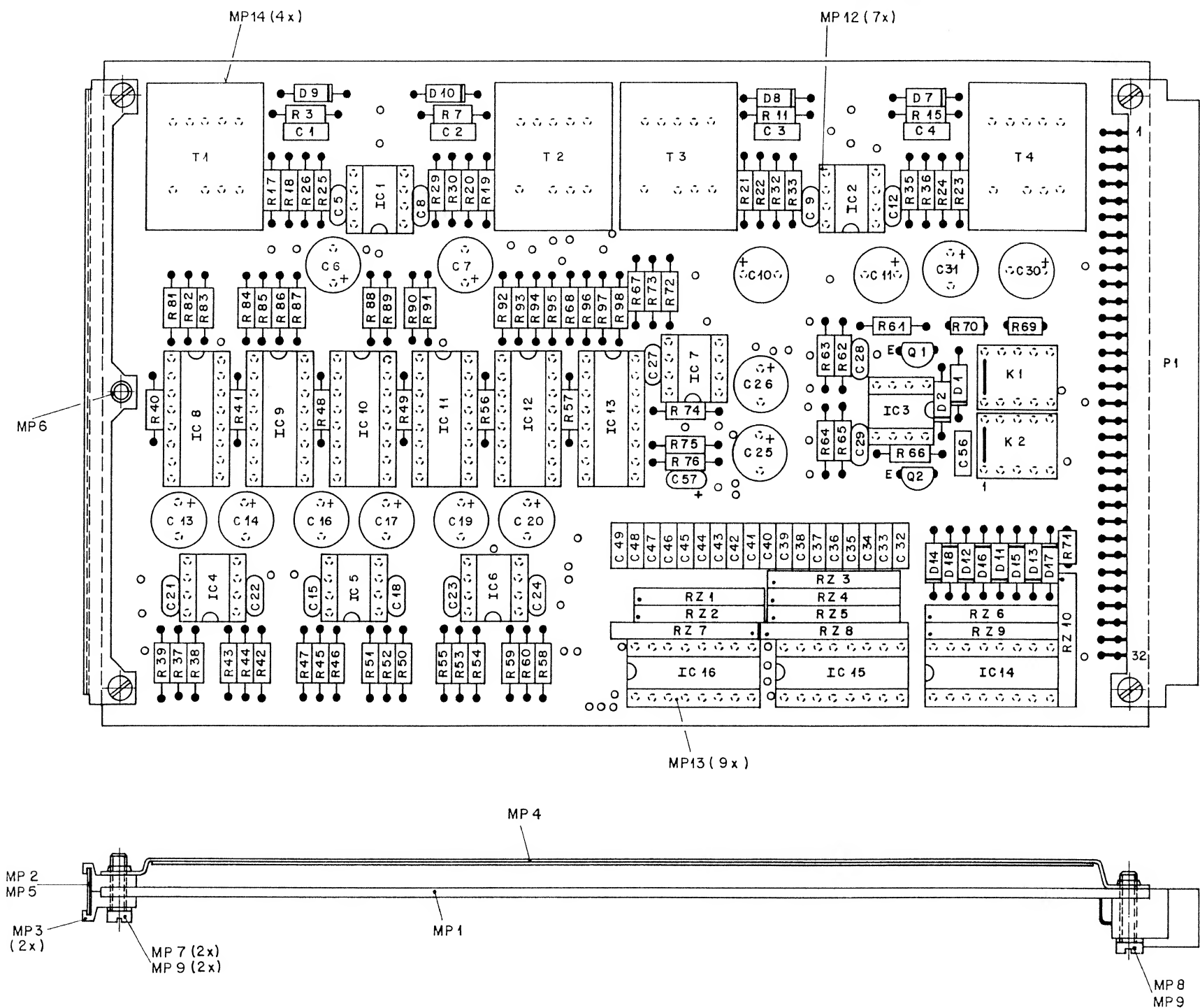


CR + Studio Monitor Mix Amplifier 1.917.300.00





CR + Studio Monitor Mix Amplifier 1.917.300.00



Änderung					③
19.3.90	7A	1A	1A		②
27.10.89	1.76	1A	1A		①
Datum	Gez.	Gespr.	Ges.	Index	④

STUDER REGENSDORF ZÜRICH	Benennung: <b>MONITOR MIX. AMPLIFIER ESE</b>	Nr.: <b>1.917.300-00</b>
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Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
C....1	59.06.0682	6,8 nF	10%, 63V, PE	
C....2	59.06.0682	6,8 nF	10%, 63V, PE	
C....3	59.06.0682	6,8 nF	10%, 63V, PE	
C....4	59.06.0682	6,8 nF	10%, 63V, PE	
C....5	59.34.4331	330 pF	5%, 63V, CER	
C....6	59.22.4101	100 uF	-20%, 10V, EL	
C....7	59.22.4101	100 uF	-20%, 10V, EL	
C....8	59.34.4331	330 pF	5%, 63V, CER	
C....9	59.34.4331	330 pF	5%, 63V, CER	
C....10	59.22.4101	100 uF	-20%, 10V, EL	
C....11	59.22.4101	100 uF	-20%, 10V, EL	
C....12	59.34.4331	330 pF	5%, 63V, CER	
C....13	59.22.4101	100 uF	-20%, 10V, EL	
C....14	59.22.4101	100 uF	-20%, 10V, EL	
C....15	59.34.4101	100 pF	5%, 63V, CER	
C....16	59.22.4101	100 uF	-20%, 10V, EL	
C....17	59.22.4101	100 uF	-20%, 10V, EL	
C....18	59.34.4101	100 pF	5%, 63V, CER	
C....19	59.22.4101	100 uF	-20%, 10V, EL	
C....20	59.22.4101	100 uF	-20%, 10V, EL	
C....21	59.34.4101	100 pF	5%, 63V, CER	
C....22	59.34.4101	100 pF	5%, 63V, CER	
C....23	59.34.4101	100 pF	5%, 63V, CER	
C....24	59.34.4101	100 pF	5%, 63V, CER	
C....25	59.22.4101	100 uF	-20%, 10V, EL	
C....26	59.22.4101	100 uF	-20%, 10V, EL	
C....27	59.34.4101	100 pF	5%, 63V, CER	
C....28	59.34.4101	100 pF	5%, 63V, CER	
C....29	59.34.4101	100 pF	5%, 63V, CER	
C....30	59.22.5101	100 uF	-20%, 25V, EL	
C....31	59.22.5101	100 uF	-20%, 25V, EL	
C....32	59.34.4101	100 pF	5%, 63V, CER	
C....33	59.34.4101	100 pF	5%, 63V, CER	
C....34	59.34.4101	100 pF	5%, 63V, CER	
C....35	59.34.4101	100 pF	5%, 63V, CER	
C....36	59.34.4101	100 pF	5%, 63V, CER	
C....37	59.34.4101	100 pF	5%, 63V, CER	
C....38	59.34.4101	100 pF	5%, 63V, CER	
C....39	59.34.4101	100 pF	5%, 63V, CER	
C....40	59.34.4101	100 pF	5%, 63V, CER	
C....41	59.34.4101	100 pF	5%, 63V, CER	
C....42	59.34.4101	100 pF	5%, 63V, CER	
C....43	59.34.4101	100 pF	5%, 63V, CER	
C....44	59.34.4101	100 pF	5%, 63V, CER	
C....45	59.34.4101	100 pF	5%, 63V, CER	
C....46	59.34.4101	100 pF	5%, 63V, CER	
C....47	59.34.4101	100 pF	5%, 63V, CER	
C....48	59.34.4101	100 pF	5%, 63V, CER	
C....49	59.34.4101	100 pF	5%, 63V, CER	
C....56	59.06.0682	6,8 nF	10%, 63V, PE	
C....57	59.26.0680	68 uF	-20%, 6.3V, SAL	
D....1	50.04.0125	1N 4448	any	
D....2	50.04.0125	1N 4448	any	
D....7	50.04.0125	1N 4448	any	
D....8	50.04.0125	1N 4448	any	
D....9	50.04.0105	1N 4004	any	
D....10	50.04.0105	1N 4004	any	
D....11	50.04.0125	1N 4448	any	
D....12	50.04.0125	1N 4448	any	
D....13	50.04.0125	1N 4448	any	
D....14	50.04.0125	1N 4448	any	
D....15	50.04.0125	1N 4448	any	
D....16	50.04.0125	1N 4448	any	
D....17	50.04.0125	1N 4448	any	
D....18	50.04.0125	1N 4448	any	
IC....1	50.09.0117	MC33078	Dual Op Amp	
IC....2	50.09.0117	MC33078	Dual Op Amp	
IC....3	50.09.0117	MC33078	Dual Op Amp	
IC....4	50.09.0117	MC33078	Dual Op Amp	
IC....5	50.09.0117	MC33078	Dual Op Amp	
IC....6	50.09.0117	MC33078	Dual Op Amp	
IC....7	50.05.0243	5534	single op.amp.	
IC....8	50.07.0015	4053	Triple Analog-Switch	
IC....9	50.07.0015	4053	Triple Analog-Switch	
IC....10	50.07.0015	4053	Triple Analog-Switch	
IC....11	50.07.0015	4053	Triple Analog-Switch	
IC....12	50.07.0015	4053	Triple Analog-Switch	
IC....13	50.07.0015	4053	Triple Analog-Switch	
IC....14	50.07.0018	4094	Shift & store bus register	
IC....15	50.07.0018	4094	Shift & store bus register	
IC....16	50.07.0018	4094	Shift & store bus register	
K....1	56.04.0195		SOS Relais, Type TQ2- 6V	
K....2	56.04.0195		SOS Relais, Type TQ2- 6V	
K....3	.	.	.	
K....4	.	.	.	
K....5	.	.	.	
K....6	.	.	.	
P....1	54.11.2004	1 pcs	Euro, 2 * 32 contacts	
Q....1	50.03.0496	BC 237	NPN	any
Q....2	50.03.0496	BC 237	NPN	any
Q....3	50.03.0496	BC 237	NPN	
Q....4	.	.	.	



## CR + Studio Monitor Mix Amplifier 1.917.300.00

Ad	..POS..	...REF.No...	DESCRIPTION.....	MANUFACTURER	Ad	..POS..	...REF.No...	DESCRIPTION.....	MANUFACTURER
Q....5	.	.			RZ....5	57.88.2104	100 kOhm	2%, 4 * 100k	
Q....6	.	.			RZ....6	57.88.2682	6.8 kOhm	2%, 4 * 6.8k	
R....1	.	.			RZ....7	57.88.4104	100 kOhm	2%, 8 * 100k	
R....2	.	.			RZ....8	57.88.4104	100 kOhm	2%, 8 * 100k	
R....3	57.11.3392	3.9 kOhm	1%		RZ....9	57.88.4104	100 kOhm	2%, 8 * 100k	
R....4	.	.			RZ....10	57.88.2104	100 kOhm	2%, 4 * 100k	
R....5	.	.					100 Ohm	2%, 4 * 100	
R....6	.	.			T....1	1.022.451.00		INPUT TRAF0	STUDER
R....7	57.11.3392	3.9 kOhm	1%		T....2	1.022.451.00		INPUT TRAF0	STUDER
R....8	.	.			T....3	1.022.451.00		INPUT TRAF0	STUDER
R....9	.	.			T....4	1.022.451.00		INPUT TRAF0	STUDER
R....10	.	.							
R....11	57.11.3392	3.9 kOhm	1%		MP....1	1.917.300.11	1 pcs	Print	Studer
R....12	.	.			MP....2	1.917.300.01	1 pcs	Bez. Streifen 6.3*91	Studer
R....13	.	.			MP....3	1.010.006.33	2 pcs	Griffhaelften	Studer
R....14	.	.			MP....4	1.010.090.49	1 pcs	Abschirmblech	Studer
R....15	57.11.3392	3.9 kOhm	1%		MP....5	1.010.096.49	1 pcs	Klarsicht Schild	
R....16	.	.			MP....6	28.21.1380	1 pcs	Rohrniete D2.5/6	
R....17	57.11.3391	390 Ohm	1%		MP....7	21.01.0280	2 pcs	Z - Schraube M2.5*8	
R....18	57.11.3123	12 kOhm	1%		MP....8	21.01.0281	2 pcs	Z - Schraube M2.5*10	
R....19	57.11.3391	390 Ohm	1%		MP....9	24.16.1025	4 pcs	Rippenscheibe D2.7/5	
R....20	57.11.3123	12 kOhm	1%		MP....10	43.01.0108	1 pcs	ESE-Warnschild	
R....21	57.11.3391	390 Ohm	1%		MP....11	.	.		
R....22	57.11.3123	12 kOhm	1%		MP....12	53.03.0166	7 pcs	IC-Sockel 8 Pin	
R....23	57.11.3391	390 Ohm	1%		MP....13	53.03.0168	9 pcs	IC-Sockel 16 Pin	
R....24	57.11.3123	12 kOhm	1%		MP....14	1.022.400.03	4 pcs	Isolation zu Trafo	
R....25	57.11.3473	47 kOhm	1%						
R....26	57.11.3332	3.3 kOhm	1%						
R....29	57.11.3473	47 kOhm	5%						
R....30	57.11.3332	3.3 kOhm	1%						
R....32	57.11.3473	47 kOhm	1%						
R....33	57.11.3332	3.3 kOhm	1%						
R....35	57.11.3473	47 kOhm	1%						
R....36	57.11.3332	3.3 kOhm	1%						
R....37	57.11.3473	47 kOhm	1%						
R....38	57.11.3822	8.2 kOhm	1%						
R....39	57.11.3330	33 Ohm	1%						
R....40	57.11.3223	22 kOhm	1%						
R....41	57.11.3223	22 kOhm	1%						
R....42	57.11.3330	33 Ohm	1%						
R....43	57.11.3473	47 kOhm	1%						
R....44	57.11.3822	8.2 kOhm	1%						
R....45	57.11.3473	47 kOhm	1%						
R....46	57.11.3822	8.2 kOhm	1%						
R....47	57.11.3330	33 Ohm	1%						
R....48	57.11.3223	22 kOhm	1%						
R....49	57.11.3223	22 kOhm	1%						
R....50	57.11.3330	33 Ohm	1%						
R....51	57.11.3473	47 kOhm	1%						
R....52	57.11.3822	8.2 kOhm	1%						
R....53	57.11.3473	47 kOhm	1%						
R....54	57.11.3822	8.2 kOhm	1%						
R....55	57.11.3330	33 Ohm	1%						
R....56	57.11.3223	22 kOhm	1%						
R....57	57.11.3223	22 kOhm	1%						
R....58	57.11.3330	33 Ohm	1%						
R....59	57.11.3473	47 kOhm	1%						
R....60	57.11.3822	8.2 kOhm	1%						
R....61	57.11.3330	33 Ohm	1%						
R....62	57.11.3682	6.8 kOhm	1%						
R....63	57.11.3682	6.8 kOhm	1%						
R....64	57.11.3682	6.8 kOhm	1%						
R....65	57.11.3682	6.8 kOhm	1%						
R....66	57.11.3330	33 Ohm	1%						
R....67	57.11.3103	10 kOhm	1%						
R....68	57.11.3103	10 kOhm	1%						
R....69	57.92.7014	PTC	650mA						
R....70	57.92.7014	PTC	650mA						
R....71	57.92.7014	PTC	650mA						
R....72	57.11.3682	6.8 kOhm	1%						
R....73	57.11.3682	6.8 kOhm	1%						
R....74	57.11.3103	10 kOhm	1%						
R....75	57.11.3182	1.8 kOhm	1%						
R....76	57.11.3822	8.2 kOhm	1%						
R....81	57.11.3682	6.8 kOhm	1%						
R....82	57.11.3682	6.8 kOhm	1%						
R....83	57.11.3682	6.8 kOhm	1%						
R....84	57.11.3682	6.8 kOhm	1%						
R....85	57.11.3682	6.8 kOhm	1%						
R....86	57.11.3682	6.8 kOhm	1%						
R....87	57.11.3682	6.8 kOhm	1%						
R....88	57.11.3682	6.8 kOhm	1%						
R....89	57.11.3682	6.8 kOhm	1%						
R....90	57.11.3682	6.8 kOhm	1%						
R....91	57.11.3682	6.8 kOhm	1%						
R....92	57.11.3682	6.8 kOhm	1%						
R....93	57.11.3682	6.8 kOhm	1%						
R....94	57.11.3682	6.8 kOhm	1%						
R....95	57.11.3682	6.8 kOhm	1%						
R....96	57.11.3682	6.8 kOhm	1%						
R....97	57.11.3682	6.8 kOhm	1%						
R....98	57.11.3682	6.8 kOhm	1%						
RZ....1	57.88.2104	100 kOhm	2%, 4 * 100k						
RZ....2	57.88.2104	100 kOhm	2%, 4 * 100k						
RZ....3	57.88.2104	100 kOhm	2%, 4 * 100k						
RZ....4	57.88.2104	100 kOhm	2%, 4 * 100k						

EL=Electrolytic, ElBip=Electrolytic Bipolar, PE=Polyester

MANUFACTURER: Fc=Fairchild, ITT=Intermetall, Ph=Philips,  
Ses=Sescosem, Sie=Siemens, Tf=Telefunken.

1.917.300 00 MONITOR MIX AMPLIFIER SE 89/02/2000

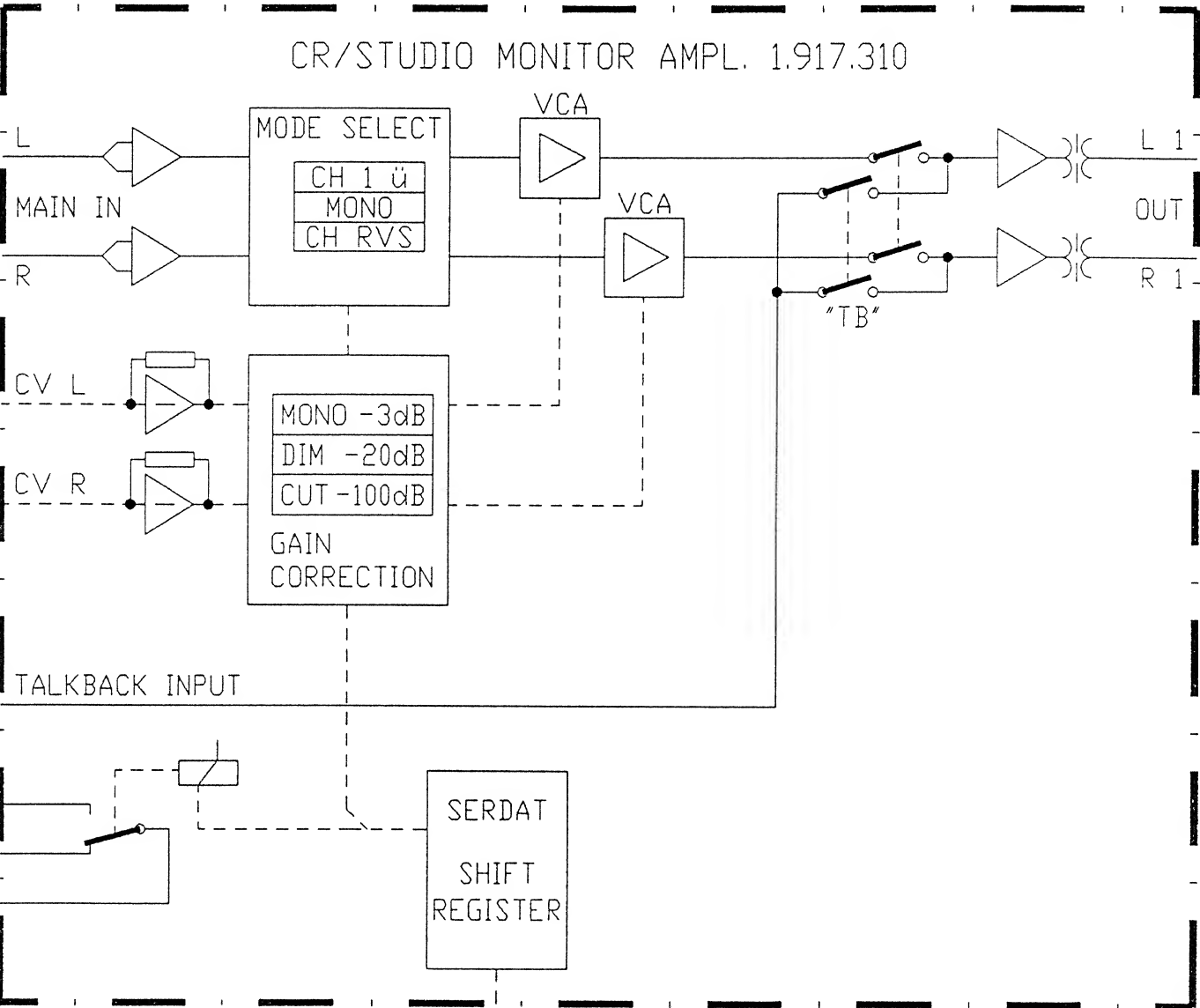
1.917.300 00 MONITOR MIX AMPLIFIER SE 90/03/1901

## Pin Location List

## CR + Studio Monitor Mix Amplifier I.917.300.00

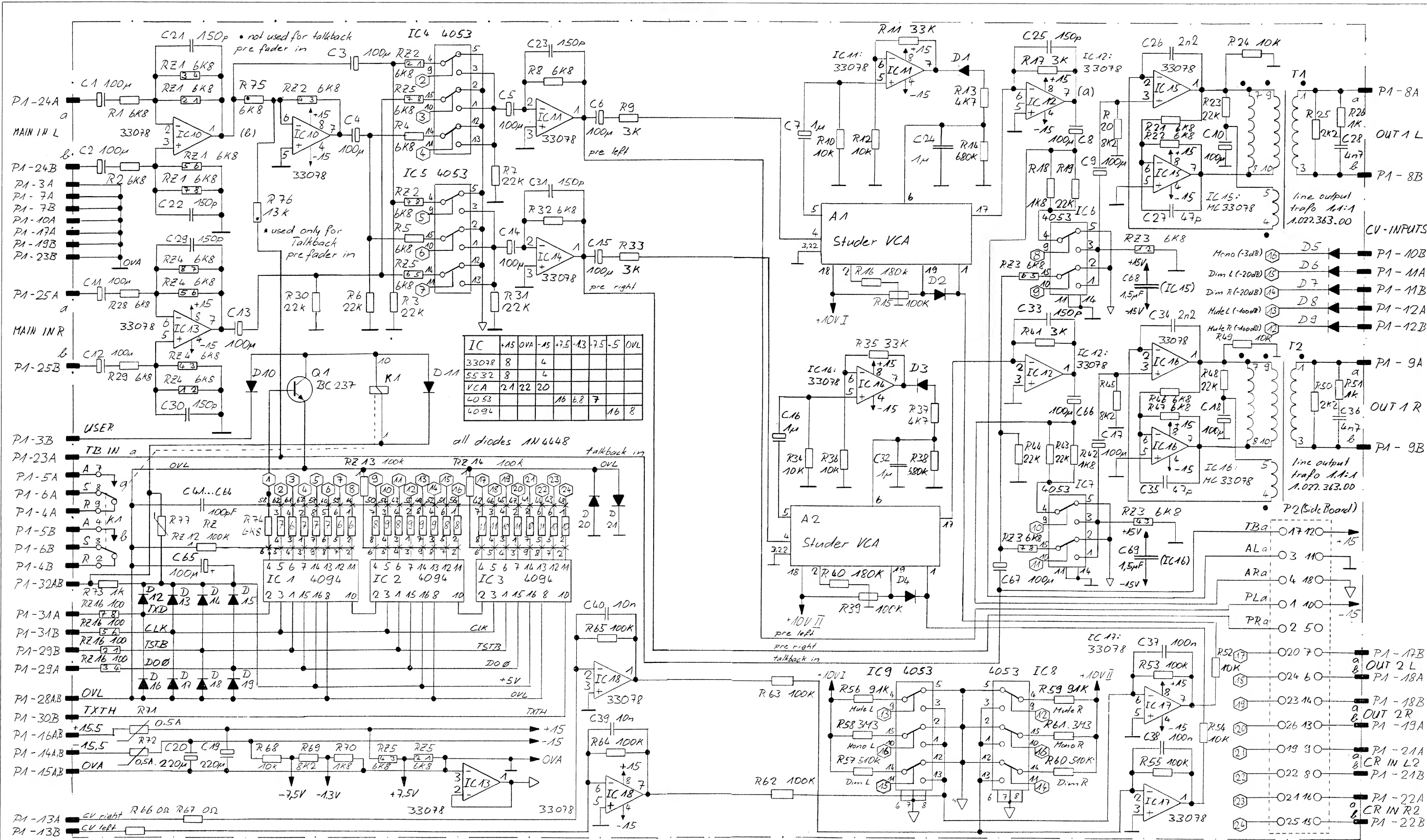
P	NO	NAME	REMARK	B=BUS O=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC		
-----			-----			
P1	01	OV-A	GROUND AUDIO	B	X	X
P1	02A	IN A-L-a	0-OHM INPUT A LEFT a	S		
P1	02B	IN A-L-b	0-OHM INPUT A LEFT b	S		
P1	03A	IN A-R-a	0-OHM INPUT A RIGHT a	S		
P1	03B	IN A-R-b	0-OHM INPUT A RIGHT b	S		
P1	04A	IN B-L-a	0-OHM INPUT B LEFT a	S		
P1	04B	IN B-L-b	0-OHM INPUT B LEFT b	S		
P1	05A	IN B-R-a	0-OHM INPUT B RIGHT a	S		
P1	05B	IN B-R-b	0-OHM INPUT B RIGHT b	S		
P1	06	OV-A	GROUND AUDIO	B	X	X
P1	07A	-	RES			
P1	07B	-	RES			
P1	8	OV-A	GROUND AUDIO	B	X	X
P1	09A	M-HL-L-a	INPUT MASTER HL LEFT a	S		
P1	09B	M-HL-L-b	INPUT MASTER HL LEFT b	S		
P1	10A	M-HL-R-a	INPUT MASTER HL RIGHT a	S		
P1	10B	M-HL-R-b	INPUT MASTER HL RIGHT b	S		
P1	11A	-	N.C.			
P1	11B	-	N.C.			
P1	12A	-	N.C.			
P1	12B	-	N.C.			
P1	13A	METER-L-a	OUTPUT METER LEFT a	S		
P1	13B	METER-L-b	OUTPUT METER LEFT b	S		
P1	14	- 15.5V	- SUPPLY	B	X	X
P1	15	OV-A	GROUND AUDIO	B	X	X
P1	16	+ 15.5V	+ SUPPLY	B	X	X
P1	17A	METER-R-a	OUTPUT METER RIGHT a	S		
P1	17B	METER-R-b	OUTPUT METER RIGHT b	S		
P1	18	OV-A	GROUND AUDIO	B	X	X
P1	19A	OV-A	GROUND AUDIO			
P1	19B	PFL-IN-L-b	PFL INPUT LEFT (b)	AS,I		
P1	20A	OV-A	GROUND AUDIO	B		
P1	20B	-	N.C.			
P1	21A	OV-A	GROUND AUDIO			
P1	21B	PFL-IN-R-b	PFL INPUT RIGHT (b)	AS,I		
P1	22A	OV-A	GROUND AUDIO			
P1	22B	CR-OUT-L-a	CR OUTPUT LEFT (a)	AS		
P1	23A	OV-A	GROUND AUDIO			
P1	23B	CR-OUT-R-a	CR OUTPUT RIGHT (a)	AS		
P1	24A	OV-A	GROUND AUDIO			
P1	24B	S-OUT-L-a	STUDIO OUTPUT LEFT (a)	AS		
P1	25A	OV-A	GROUND AUDIO			
P1	25B	S-OUT-R-a	STUDIO OUTPUT RIGHT (a)	AS		
P1	26A	OV-A	GROUND AUDIO			
P1	26B	PHO-OUT-L-a	PHONE OUTPUT LEFT (a)	AS		
P1	27A	OV-A	GROUND AUDIO			
P1	27B	PHO-OUT-R-a	PHONE OUTPUT RIGHT (a)	AS		
P1	28	OV-L	GROUND SIGN (LOGIC)	B	X	X
P1	29A	DO 0	DATA OUT 0 (ENABLE)			
P1	29B	TSTB 5	TRANSMIT STROBE 5			
P1	30A	-	RES			
P1	30B	TXTH	TRANSMIT DATA THROUGH			
P1	31A	TXD	TRANSMIT DATA			
P1	31B	TCL	TRANSMIT CLOCK			
P1	32	+ 5.5V	+ SUPPLY	B	X	X

CR / Studio Monitor Amplifier 1.917.310.00





CR / Studio Monitor Amplifier 1.917.310.00



IC	+15	OVA	-15	+7.5	-13	-7.5	-5	OVL
33078	8		4					
5532	8		4					
VCA	2	1	2	2	2			
4053				16	6	7		
4094							16	8





CR / Studio Monitor Amplifier 1.917.310.00

MP 12 (9x) MP 11 (9x)

MP 5

1.917.323-01 (4x) MP 1

MP 7

MP 3 MP 9

MP 8 (2x) MP 9 (2x)

MP 6 MP 18

MP 2 (2x) MP 3 (2x) MP 4 (2x) MP 13

MP 10

VCA CAR TRIM

VCA CAL TRIM

C.R. / STUDIO MON. AMPLIFIER 1.917.310-00

1.917.310-02

Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
A.....1	1.911.291.00		VCA Board Type 2	St
A.....2	1.911.291.00		VCA Board Type 2	St
C.....1	59.22.3101		100 uF EL 10V	
C.....2	59.22.3101		100 uF EL 10V	
C.....3	59.22.3101		100 uF EL 10V	
C.....4	59.22.3101		100 uF EL 10V	
C.....5	59.22.3101		100 uF EL 10V	
C.....6	59.22.3101		100 uF EL 10V	
C.....7	59.22.8109		1 uF EL 50V	
C.....8	59.22.3101		100 uF EL 10V	
C.....9	59.22.3101		100 uF EL 10V	
C.....10	59.22.3101		100 uF EL 10V	
C.....11	59.22.3101		100 uF EL 10V	
C.....12	59.22.3101		100 uF EL 10V	
C.....13	59.22.3101		100 uF EL 10V	
C.....14	59.22.3101		100 uF EL 10V	
C.....15	59.22.3101		100 uF EL 10V	
C.....16	59.22.8109		1 uF EL 50V	
C.....17	59.22.3101		100 uF EL 10V	
C.....18	59.22.3101		100 uF EL 10V	
C.....19	59.22.4221		220 uF EL 16V	
C.....20	59.22.4221		220 uF EL 16V	
C.....21	59.34.7151		150 pF CE	
C.....22	59.34.7151		150 pF CE	
C.....23	59.34.7151		150 pF CE	
C.....24	59.22.6100		10 uF EL 35V	
C.....25	59.06.0105		1 uF PE	
C.....26	59.34.7151		150 pF CE	
C.....27	59.34.2470		47 pF CE	
C.....28	59.06.0222		2.2 nF PE	
C.....29	59.34.2470		47 pF CE	
C.....30	59.06.0472		4.7 nF PE	
C.....31	59.34.7151		150 pF CE	
C.....32	59.22.6100		10 uF EL 35V	
C.....33	59.06.0105		1 uF PE	
C.....34	59.34.7151		150 pF CE	
C.....35	59.34.2470		47 pF CE	
C.....36	59.06.0222		2.2 nF PE	
C.....37	59.34.2470		47 pF CE	
C.....38	59.06.0472		4.7 nF PE	
C.....39	59.06.0104		100 nF PE	
C.....40	59.06.0103		10 nF PE	
C.....41	59.34.4101		100 pF CE	
C.....42	59.34.4101		100 pF CE	
C.....43	59.34.4101		100 pF CE	
C.....44	59.34.4101		100 pF CE	
C.....45	59.34.4101		100 pF CE	
C.....46	59.34.4101		100 pF CE	
C.....47	59.34.4101		100 pF CE	
C.....48	59.34.4101		100 pF CE	
C.....49	59.34.4101		100 pF CE	
C.....50	59.34.4101		100 pF CE	
C.....51	59.34.4101		100 pF CE	
C.....52	59.34.4101		100 pF CE	
C.....53	59.34.4101		100 pF CE	
C.....54	59.34.4101		100 pF CE	
C.....55	59.34.4101		100 pF CE	
C.....56	59.34.4101		100 pF CE	
C.....57	59.34.4101		100 pF CE	
C.....58	0		not used	
C.....59	59.34.4101		100 pF CE	
C.....60	59.34.4101		100 pF CE	
C.....61	59.34.4101		100 pF CE	
C.....62	59.34.4101		100 pF CE	
C.....63	59.34.4101		100 pF CE	
C.....64	59.34.4101		100 pF CE	
C.....65	59.22.3101		100 uF EL 10V	
C.....66	59.22.3101		100 uF EL 10V	
C.....67	59.22.3101		100 uF EL 10V	
C.....68	59.32.4152		1.5 nF CE	
C.....69	59.32.4152		1.5 nF CE	
D.....1	50.04.0125		1N4448	
D.....2	50.04.0125		1N4448	
D.....3	50.04.0125		1N4448	
D.....4	50.04.0125		1N4448	
D.....5	50.04.0125		1N4448	
D.....6	50.04.0125		1N4448	
D.....7	50.04.0125		1N4448	
D.....8	50.04.0125		1N4448	
D.....9	50.04.0125		1N4448	
D.....10	50.04.0125		1N4448	
D.....11	50.04.0125		1N4448	
D.....12	50.04.0125		1N4448	
D.....13	50.04.0125		1N4448	
D.....14	50.04.0125		1N4448	
D.....15	50.04.0125		1N4448	
D.....16	50.04.0125		1N4448	
D.....17	50.04.0125		1N4448	
D.....18	50.04.0125		1N4448	
D.....19	50.04.0125		1N4448	
D.....20	50.04.0125		1N4448	
D.....21	50.04.0125		1N4448	

STUDER  
REGENSDORF  
ZÜRICH

Benennung: C.R./STUDIO MONITOR  
AMPLIFIER ESE

Nummer: 1.917.310-00

Änderung	Datum	Gez.	Gepr.	Index
24.4.91				③
15.11.90				②
22.9.89				①

Kopie für:



## CR / Studio Monitor Amplifier 1.917.310.00

Ad	..POS..	..REF.No..	DESCRIPTION.....	MANUFACTURER	Ad	..POS..	..REF.No..	DESCRIPTION.....	MANUFACTURER
IC....1	50.07.0018	CD4094	shift and store busregister		R....55	57.11.3104	100 kOhm	1% MF	
IC....2	50.07.0018	CD4094	shift and store busregister		R....56	57.11.3913	91 kOhm	1% MF	
IC....3	50.07.0018	CD4094	shift and store busregister		R....57	57.11.3514	510 kOhm	1% MF	
IC....4	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....58	57.11.5335	3.3 MOhm	1% MF	
IC....5	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....59	57.11.3913	91 kOhm	1% MF	
IC....6	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....60	57.11.3514	510 kOhm	1% MF	
IC....7	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....61	57.11.5335	3.3 MOhm	1% MF	
IC....8	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....62	57.11.3104	100 kOhm	1% MF	
IC....9	50.07.0015	CD4053	triple 2 ch. analog mux/demux		R....63	57.11.3104	100 kOhm	1% MF	
IC....10	50.09.0117	MC33078	dual op. amp.		R....64	57.11.3104	100 kOhm	1% MF	
IC....11	50.09.0117	MC33078	dual op. amp.		R....65	57.11.3104	100 kOhm	1% MF	
IC....12	50.09.0117	MC33078	dual op. amp.		R....66	57.11.3000	0 Ohm	Bridge	
IC....13	50.09.0117	MC33078	dual op. amp.		R....67	57.11.3000	0 Ohm	Bridge	
IC....14	50.09.0117	MC33078	dual op. amp.		R....68	57.11.3103	10 kOhm	1% MF	
IC....15	50.09.0106	NE5532AN	dual op. amp.		R....69	57.11.3822	8.2 kOhm	1% MF	
IC....16	50.09.0106	NE5532AN	dual op. amp.		R....70	57.11.3182	1.8 kOhm	1% MF	
IC....17	50.09.0117	MC33078	dual op. amp.		R....71	57.92.7013	500 mA	R - PTC 0.5 Ohm	
IC....18	50.09.0117	MC33078	dual op. amp.		R....72	57.92.7013	500 mA	R - PTC 0.5 Ohm	
K.....1	56.04.0195	2*U	RELAYS 6V 2*U		R....73	57.11.3102	1.0 kOhm	1% MF 5V-R Version used only (see R77)	
HP....1	1.917.310.11	1 pcs	PCB		R....74	57.11.3682	6.8 kOhm	1% MF	
HP....2	1.010.006.33	2 pcs	Griffhaelfte		R....75	57.11.3682	6.8 kOhm	1% MF TB AF used only (see R76)	
HP....3	21.01.0280	2 pcs	Z-Schr.,ZN,M2.5*8		R....76	.	0	not used TB PF Version used only 57.11.3133(see R75)	
HP....4	24.16.1025	2 pcs	Rippenscheibe D2.7/5		R....77	.	0	not used 5V-PTC Version used only 57.92.1121(see R73)	
HP....5	28.21.1380	1 pcs	Rohrniete, D2.25*6.5		RZ....1	57.88.2682	6.8 kOhm	2% 4*1 network	
HP....6	28.21.1390	1 pcs	Rohrniete, D2.25*7.0		RZ....2	57.88.2682	6.8 kOhm	2% 4*1 network	
HP....7	1.010.096.49	1 pcs	Klarsichtschild		RZ....3	57.88.2682	6.8 kOhm	2% 4*1 network	
HP....8	1.010.090.49	1 pcs	Abschirmung komplett		RZ....4	57.88.2682	6.8 kOhm	2% 4*1 network	
HP....9	21.01.0281	2 pcs	Z-Schr.,ZN,M2.5*10		RZ....5	57.88.2682	6.8 kOhm	2% 4*1 network	
HP....10	24.16.1025	3 pcs	Rippenscheibe D2.7/5		RZ....6	57.88.2104	100 kOhm	2% 4*1 network	
HP....11	1.010.204.27	1 pcs	Mutterbolzen M2.5*25		RZ....7	57.88.2104	100 kOhm	2% 4*1 network	
MP....11	53.03.0166	9 pcs	IC-Socket, 8-pin		RZ....8	57.88.2104	100 kOhm	2% 4*1 network	
MP....12	53.03.0168	9 pcs	IC-Socket, 16-pin		RZ....9	57.88.2104	100 kOhm	2% 4*1 network	
MP....13	1.917.142.01	1 pcs	Halter		RZ....10	57.88.2104	100 kOhm	2% 4*1 network	
MP....14	43.01.0108	1 pcs	ESE-Schild		RZ....11	57.88.2104	100 kOhm	2% 4*1 network	
MP....15	1.917.310.01	1 pcs	Bezeichnungstreifen 6.3*91		RZ....12	57.88.4104	100 kOhm	2% 8*1 network	
Q.....1	50.03.0436	BC 237	UNI NPN 100 mA		RZ....13	57.88.4104	100 kOhm	2% 8*1 network	
P.....1	54.11.2004	2*32 pin	eurocard-connector		RZ....14	57.88.4104	100 kOhm	2% 8*1 network	
P.....2	54.14.2003	26 pin	PCB ribbon connector		RZ....15	57.88.2101	100 Ohm	2% 4*1 network	
R....1	57.11.3682	6.8 kOhm	1% MF		05 T....1	1.022.363.81		Line Output-Trafo	
R....2	57.11.3682	6.8 kOhm	1% MF		05 T....2	1.022.363.81		Line Output-Trafo	
R....3	57.11.3223	22 kOhm	1% MF		index (4)	29.02.92		Rohrniete neu 7.0 statt 6.5 mm	
R....4	57.11.3682	6.8 kOhm	1% MF		(5)	23.11.93		Trafo 1.022.363.81 Ri < 40 Ohm	
R....5	57.11.3682	6.8 kOhm	1% MF		CE			= Ceramic, PE=Polyester	
R....6	57.11.3223	22 kOhm	1% MF		MANUFACTURER: St = STUDER				
R....7	57.11.3223	22 kOhm	1% MF			1.917.310.00	CR/STUDIO-MONITOR AMPLIFIER	SCA88/10/1000	
R....8	57.11.3682	6.8 kOhm	1% MF			1.917.310.00	CR/STUDIO-MONITOR AMPLIFIER	SCA90/12/1401	
R....9	57.11.3302	3.0 kOhm	1% MF			1.917.310.00	CR/STUDIO-MONITOR AMPLIFIER	SCA91/04/2402	
R....10	57.11.3103	10 kOhm	1% MF			1.917.310.00	CR/STUDIO-MONITOR AMPLIFIER	SE92/07/0203	
R....11	57.11.3333	33 kOhm	1% MF			1.917.310.00	CR/STUDIO-MONITOR AMPLIFIER	SE92/02/2904	
R....12	57.11.3103	10 kOhm	1% MF			1.917.310.00	CR/STUDIO-MONITOR AMPLIFIER	FRI93/11/2305	
R....13	57.11.3472	4.7 kOhm	1% MF						
R....14	57.11.3684	680 kOhm	1% MF						
R....15	58.01.9104	100 kOhm	trimpot						
R....16	57.11.3184	180 kOhm	1% MF						
R....17	57.11.3302	3.0 kOhm	1% MF						
R....18	57.11.3182	1.8 kOhm	1% MF						
R....19	57.11.3223	22 kOhm	1% MF						
R....20	57.11.3822	8.2 kOhm	1% MF						
R....21	57.11.3682	6.8 kOhm	1% MF						
R....22	57.11.3682	6.8 kOhm	1% MF						
R....23	57.11.3223	22 kOhm	1% MF						
R....24	57.11.3103	10 kOhm	1% MF						
R....25	57.11.3222	2.2 kOhm	1% MF						
R....26	57.11.3102	1.0 kOhm	1% MF						
R....28	57.11.3682	6.8 kOhm	1% MF						
R....29	57.11.3682	6.8 kOhm	1% MF						
R....30	57.11.3223	22 kOhm	1% MF						
R....31	57.11.3223	22 kOhm	1% MF						
R....32	57.11.3682	6.8 kOhm	1% MF						
R....33	57.11.3302	3.0 kOhm	1% MF						
R....34	57.11.3103	10 kOhm	1% MF						
R....35	57.11.3333	33 kOhm	1% MF						
R....36	57.11.3103	10 kOhm	1% MF						
R....37	57.11.3472	4.7 kOhm	1% MF						
R....38	57.11.3684	680 kOhm	1% MF						
R....39	58.01.9104	100 kOhm	trimpot						
R....40	57.11.3184	180 kOhm	1% MF						
R....41	57.11.3302	3.0 kOhm	1% MF						
R....42	57.11.3182	1.8 kOhm	1% MF						
R....43	57.11.3223	22 kOhm	1% MF						
R....44	57.11.3223	22 kOhm	1% MF						
R....45	57.11.3822	8.2 kOhm	1% MF						
R....46	57.11.3682	6.8 kOhm	1% MF						
R....47	57.11.3682	6.8 kOhm	1% MF						
R....48	57.11.3223	22 kOhm	1% MF						
R....49	57.11.3103	10 kOhm	1% MF						
R....50	57.11.3222	2.2 kOhm	1% MF						
R....51	57.11.3102	1 kOhm	1% MF						
R....52	57.11.3103	10 kOhm	1% MF						
R....53	57.11.3104	100 kOhm	1% MF						
R....54	57.11.3103	10 kOhm	1% MF						

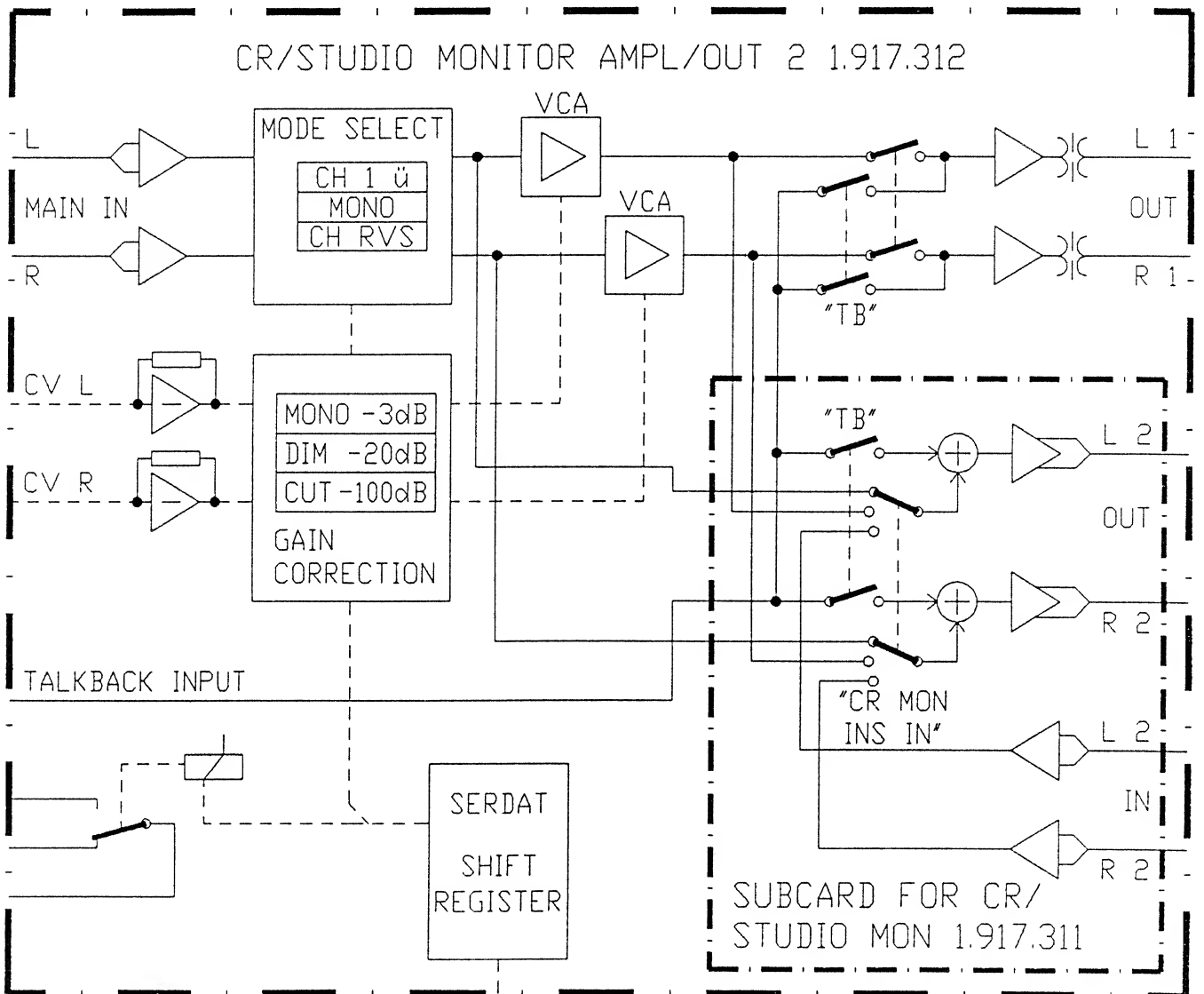
## Pin Location List

CR / Studio Monitor Amplifier 1.917.310.00

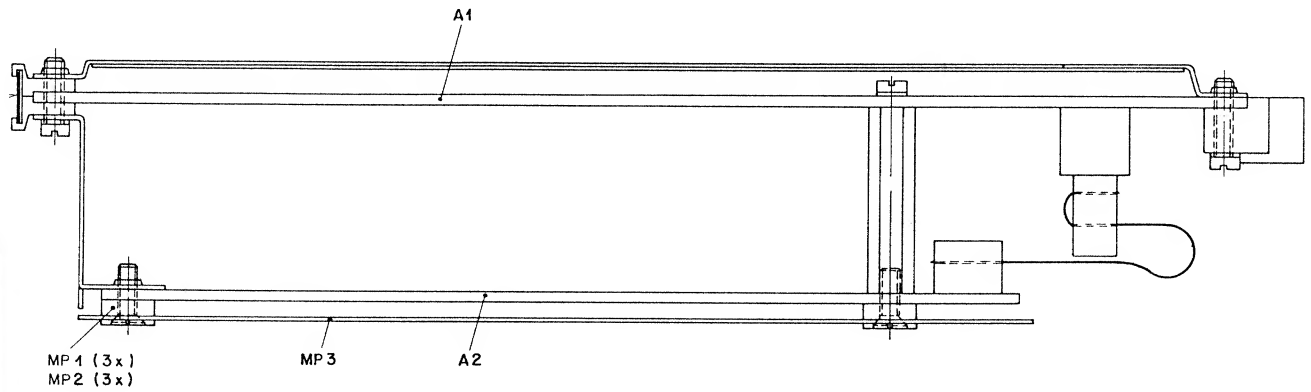
P	NO	NAME	REMARK	B=BUS	O=CONNECTION	S=SYMMETRIC	I=INVERS	AS=ASYMMETRIC
-----			-----					-----
P1	01A	-	RES					
P1	01B	-	RES					
P1	02A	-	RES					
P1	02B	-	RES					
P1	03A	0V-A	GROUND AUDIO					
P1	03B	D USER						
P1	04A	REL-A-r	RELAIS A ; r= BREAK CONTACT					
P1	04B	REL-B-r	RELAIS B ; r= BREAK CONTACT					
P1	05A	REL-A-a	RELAIS A ; a= MAKE CONTACT					
P1	05B	REL-B-a	RELAIS B ; a= MAKE CONTACT					
P1	06A	REL-A-s	RELAIS A ; s= CONTACT					
P1	06B	REL-B-s	RELAIS B ; s= CONTACT					
P1	07	0V-A	GROUND AUDIO	B		X	X	
P1	08A	MON-OUT1-L-a	MONITOR OUTPUT 1 LEFT a	S				
P1	08B	MON-OUT1-L-b	MONITOR OUTPUT 1 LEFT b	S				
P1	09A	MON-OUT1-R-a	MONITOR OUTPUT 1 RIGHT a	S				
P1	09B	MON-OUT1-R-b	MONITOR OUTPUT 1 RIGHT b	S				
P1	10A	0V-A	GROUND AUDIO					
P1	10B	CV-MONO-D	CONTROL VOLTAGE MONO					
P1	11A	CV-DIM -D-L	CONTROL VOLTAGE -20dB LEFT					
P1	11B	CV-DIM -D-R	CONTROL VOLTAGE -20dB RIGHT					
P1	12A	CV-MUTE-D-L	CONTROL VOLTAGE MUTE LEFT					
P1	12B	CV-MUTE-D-R	CONTROL VOLTAGE MUTE RIGHT					
P1	13A	CV-VCA-R	CONTROL VOLTAGE VCA RIGHT					
P1	13B	CV-VCA-L	CONTROL VOLTAGE VCA LEFT					
P1	14	- 15.5V	- SUPPLY	B		X	X	
P1	15	0V-A	GROUND AUDIO	B		X	X	
P1	16	+ 15.5V	+ SUPPLY	B		X	X	
P1	17A	0V-A	GROUND AUDIO					
P1	17B	MON-OUT2-L-a	MONITOR OUTPUT 2 LEFT a	S				
P1	18A	MON-OUT2-L-b	MONITOR OUTPUT 2 LEFT b	S				
P1	18B	MON-OUT2-R-a	MONITOR OUTPUT 2 RIGHT a	S				
P1	19A	MON-OUT2-R-b	MONITOR OUTPUT 2 RIGHT b	S				
P1	19B	0V-A	GROUND AUDIO					
P1	20A	-	N.C.					
P1	20B	-	N.C.					
P1	21A	MON-IN2-L-a	MONITOR INPUT 2 LEFT a	S				
P1	21B	MON-IN2-L-b	MONITOR INPUT 2 LEFT b	S				
P1	22A	MON-IN2-R-a	MONITOR INPUT 2 RIGHT a	S				
P1	22B	MON-IN2-R-b	MONITOR INPUT 2 RIGHT b	S				
P1	23A	TB-IN-a	TALKBACK INPUT (a)	AS				
P1	23B	0V-A	GROUND AUDIO					
P1	24A	MON-IN1-L-a	MONITOR INPUT 1 LEFT a	S				
P1	24B	MON-IN1-L-b	MONITOR INPUT 1 LEFT b	S				
P1	25A	MON-IN1-R-a	MONITOR INPUT 1 RIGHT a	S				
P1	25B	MON-IN1-R-b	MONITOR INPUT 1 RIGHT b	S				
P1	26A	-	RES					
P1	26B	-	RES					
P1	27A	-	RES					
P1	27B	-	RES					
P1	28	0V-L	GROUND SIGN (LOGIC)	B		X	X	
P1	29A	DO 0	DATA OUT 0 (ENABLE)					
P1	29B	TSTB 4	TRANSMIT STROBE 4					
P1	30A	-	RES					
P1	30B	TXTH	TRANSMIT DATA THROUGH					
P1	31A	TXD	TRANSMIT DATA					
P1	31B	TCL	TRANSMIT CLOCK					
P1	32	+ 5.5V	+ SUPPLY	B		X	X	

Subcard for CR / Studio Monitor 1.917.311.00

CR / Studio Monitor Amplifier / Out 1.917.312.00



## CR / Studio Monitor Amplifier / Out 2 1.917.312.00



Angabe					(3)
					(2)
					(1)
Angabe	30.1.90	A. 1/2	1/2	SCA	(0)
Datum	Gez	Gepr	Ges	Index	

Kopie für:

STUDER REGENSDORF ZÜRICH	Benennung: C.R./STUDIO MONITOR AMPL./ OUT 2	Nummer: 1.917.312 - 00
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Ad ...POS... REF.No... DESCRIPTION.....MANUFACTURER

A.....1	1.917.310.00		CR/STUDIO MONITOR AMP. ,A
A.....2	1.917.311.00		SUBCARD FOR CR/STUDIO MON. ,A
01 MP....1	21.01.2279	3 pcs	S-SCHR. ,ZN,M2.5*6
MP....1	21.01.2280	3 pcs	S-SCHR. ,ZN,M2.5*8
MP....2	1.917.142.02	3 pcs	Isolierhülse
MP....3	1.917.142.03	1 pcs	Isolation
MP....4	1.917.312.01	1 pcs	Bezeichnungstreifen 6,3 * 91

(01) 90/03/01 MP 1 Screws were too short

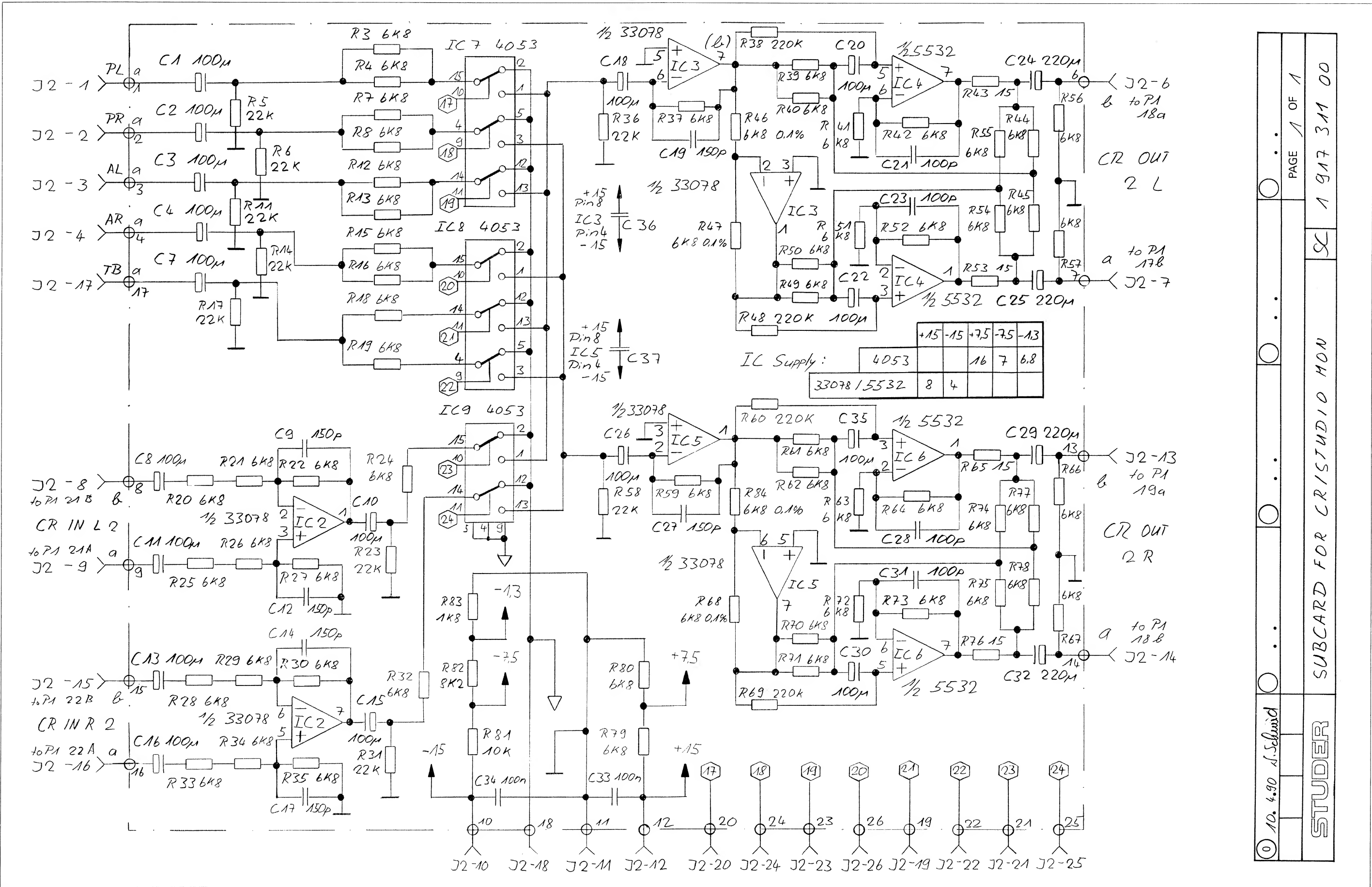
CER=Ceramic, PE=Polyester  
MF=Metal Film, PMG-Cermet

MANUFACTURER: Ex=Exar, NEC=Nippon Electric Corp., Ph=Philips, Ra-Raytheon,  
Sig=Signetics, St=Studer.

1.917.312.00 CR/STUDIO-MONITOR AMPL/OUT 2 SCA90/08/0100

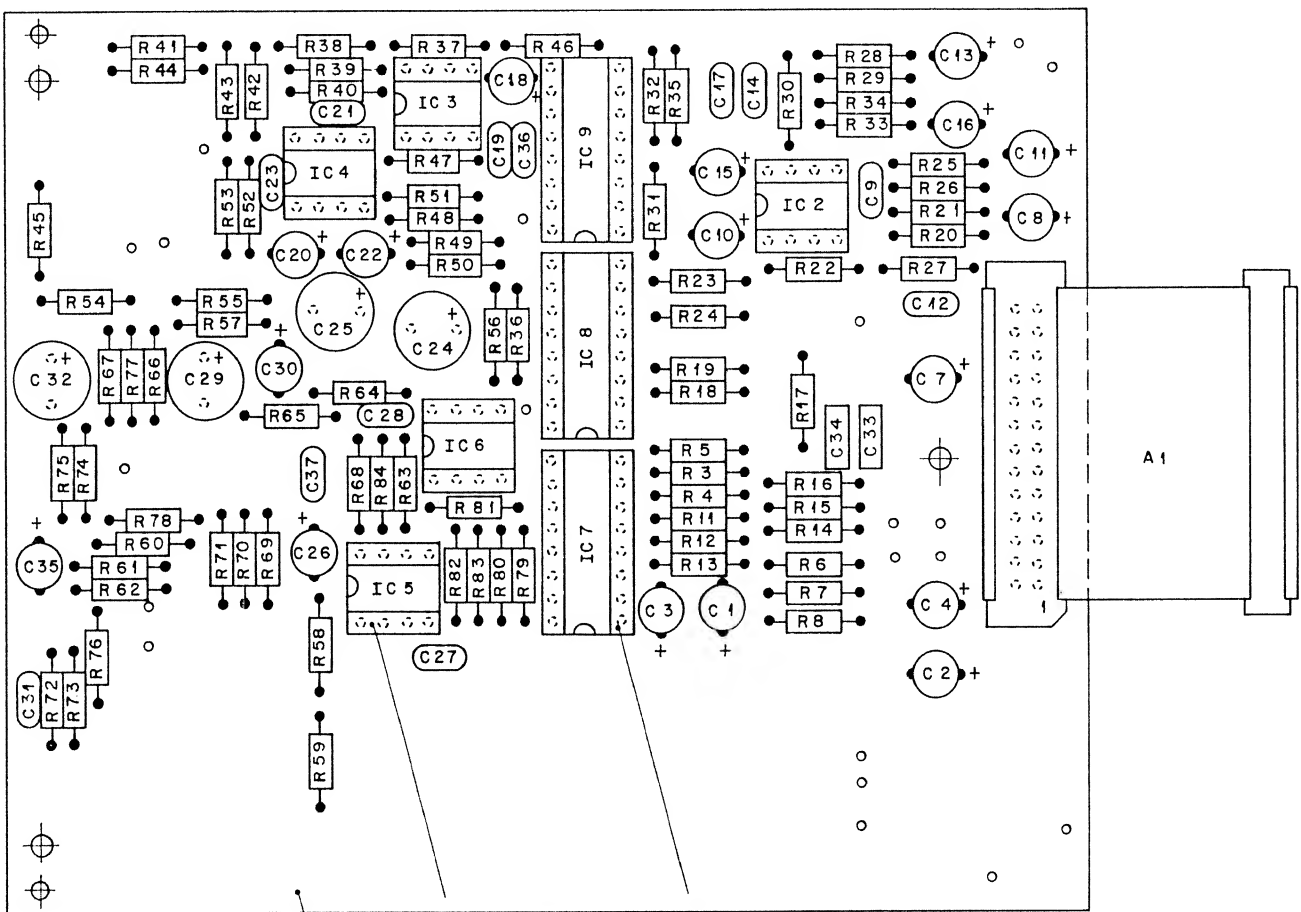
1.917.312.00 CR/STUDIO-MONITOR AMPL/OUT 2 SCA90/03/0101

Subcard for CR / Studio Monitor 1.917.311.00





Subcard for CR / Studio Monitor 1.917.311.00



MP1

MP2 (5x)

MP3 (3x)

Änderung					⑤
					④
					③
					②
					①
Ausgabe	21.9.89	4/8	W	KA	⑥
Datum	Gez	Gepr	Ges	Index	

Kopie für:

STUDER REGENSDORF ZÜRICH	Benennung: SUBCARD FOR C.R. STUDIO MON. ESE	Nummer: 1.917. 311-00
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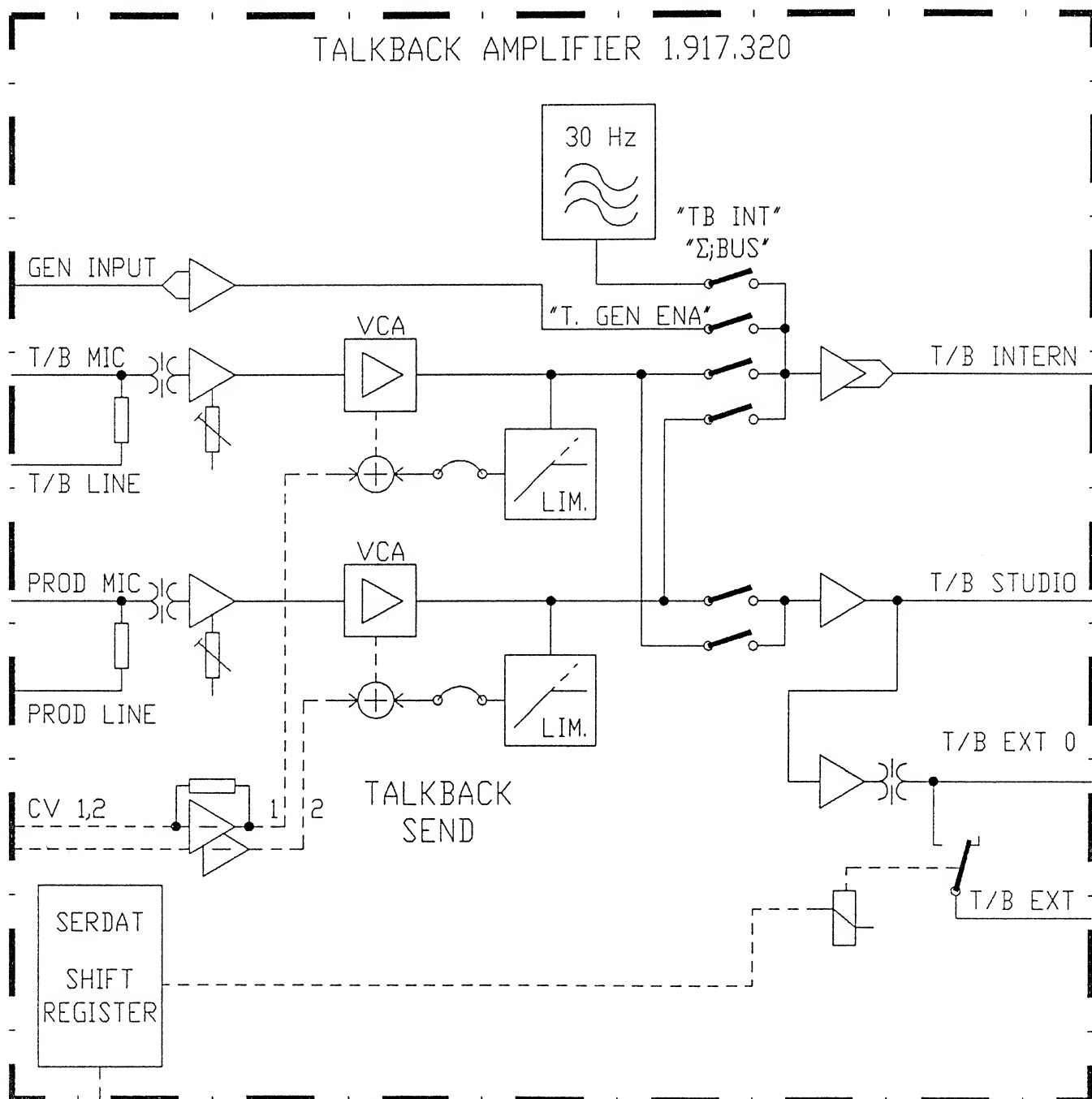
Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER	Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
A.....1	1.023.112.01		Flachkabel 26 Pol	ST	R....51	57.11.3682	6.8 kOhm	1% MF	
C.....1	59.22.3101	100 uF	EL 10V		R....52	57.11.3682	6.8 kOhm	1% MF	
C.....2	59.22.3101	100 uF	EL 10V		R....53	57.11.3150	15 Ohm	1% MF	
C.....3	59.22.3101	100 uF	EL 10V		R....54	57.11.3682	6.8 kOhm	1% MF	
C.....4	59.22.3101	100 uF	EL 10V		R....55	57.11.3682	6.8 kOhm	1% MF	
C.....7	59.22.3101	100 uF	EL 10V		R....56	57.11.3682	6.8 kOhm	1% MF	
C.....8	59.22.3101	100 uF	EL 10V		R....57	57.11.3682	6.8 kOhm	1% MF	
C.....9	59.34.7151	150 pF	CE 63V 2%		R....58	57.11.3223	22 kOhm	1% MF	
C.....10	59.22.3101	100 uF	EL 10V		R....59	57.11.3682	6.8 kOhm	1% MF	
C.....11	59.22.3101	100 uF	EL 10V		R....60	57.11.3224	220 kOhm	1% MF	
C.....12	59.34.7151	150 pF	CE 63V 2%		R....61	57.11.3682	6.8 kOhm	1% MF	
C.....13	59.22.3101	100 uF	EL 10V		R....62	57.11.3682	6.8 kOhm	1% MF	
C.....14	59.34.7151	150 pF	CE 63V 2%		R....63	57.11.3682	6.8 kOhm	1% MF	
C.....15	59.22.3101	100 uF	EL 10V		R....64	57.11.3682	6.8 kOhm	1% MF	
C.....16	59.22.3101	100 uF	EL 10V		R....65	57.11.3150	15 Ohm	1% MF	
C.....17	59.34.7151	150 pF	CE 63V 2%		R....66	57.11.3682	6.8 kOhm	1% MF	
C.....18	59.22.3101	100 uF	EL 10V		R....67	57.11.3682	6.8 kOhm	1% MF	
C.....19	59.34.7151	150 pF	CE 63V 2%		R....68	57.99.0250	6.8 kOhm	0.1% MF	
C.....20	59.22.3101	100 uF	EL 10V		R....69	57.11.3224	220 kOhm	1% MF	
C.....21	59.34.4101	100 pF	CE 63V 2%		R....70	57.11.3682	6.8 kOhm	1% MF	
C.....22	59.22.3101	100 uF	EL 10V		R....71	57.11.3682	6.8 kOhm	1% MF	
C.....23	59.34.4101	100 pF	CE 63V 2%		R....72	57.11.3682	6.8 kOhm	1% MF	
C.....24	59.22.4221	220 uF	EL 16V		R....73	57.11.3682	6.8 kOhm	1% MF	
C.....25	59.22.4221	220 uF	EL 16V		R....74	57.11.3682	6.8 kOhm	1% MF	
C.....26	59.22.3101	100 uF	EL 10V		R....75	57.11.3682	6.8 kOhm	1% MF	
C.....27	59.34.7151	150 pF	CE 63V 2%		R....76	57.11.3150	15 Ohm	1% MF	
C.....28	59.34.4101	100 pF	CE 63V 2%		R....77	57.11.3682	6.8 kOhm	1% MF	
C.....29	59.22.4221	220 uF	EL 16V		R....78	57.11.3682	6.8 kOhm	1% MF	
C.....30	59.22.3101	100 uF	EL 10V		R....79	57.11.3682	6.8 kOhm	1% MF	
C.....31	59.34.4101	100 pF	CE 63V 2%		R....80	57.11.3682	6.8 kOhm	1% MF	
C.....32	59.22.4221	220 uF	EL 16V		R....81	57.11.3103	10 kOhm	1% MF	
C.....33	59.06.0104	100 nF	PE 63V		R....82	57.11.3822	8.2 kOhm	1% MF	
C.....34	59.06.0104	100 nF	PE 63V		R....83	57.11.3182	1.8 kOhm	1% MF	
C.....35	59.22.3101	100 uF	EL 10V		R....84	57.99.0250	6.8 kOhm	0.1% MF	
C.....36	59.06.0103	10 nF	PE 63V		R....85	.	0	not used	
C.....37	59.06.0103	10 nF	PE 63V		R....86	.	0	not used	
IC.....2	50.09.0117	MC33078	dual op. amp.						
IC.....3	50.09.0117	MC33078	dual op. amp.						
IC.....4	50.09.0105	NE5532N	dual op. amp.						
IC.....5	50.09.0117	MC33078	dual op. amp.						
IC.....6	50.09.0105	NE5532N	dual op. amp.						
IC.....7	50.07.0015	CD4053	triple 2 ch. analog mux/demux						
IC.....8	50.07.0015	CD4053	triple 2 ch. analog mux/demux						
IC.....9	50.07.0015	CD4053	triple 2 ch. analog mux/demux						
MP.....1	1.917.311.11	1 pcs	SUB-PCB for CR/Studio Monitor						
MP.....2	53.03.0166	5 pcs	IC-Socket 8-pin						
MP.....3	53.03.0168	3 pcs	IC-Socket 16-pin						
MP.....4	43.01.0108	1 pcs	ESE-Schild						
MP.....5	1.917.311.04	1 pcs	Nr-Etikette 5*20						
R....3	57.11.3682	6.8 kOhm	1% MF						
R....4	57.11.3682	6.8 kOhm	1% MF						
R....5	57.11.3223	22 kOhm	1% MF						
R....6	57.11.3223	22 kOhm	1% MF						
R....7	57.11.3682	6.8 kOhm	1% MF						
R....8	57.11.3682	6.8 kOhm	1% MF						
R....11	57.11.3223	22 kOhm	1% MF						
R....12	57.11.3682	6.8 kOhm	1% MF						
R....13	57.11.3682	6.8 kOhm	1% MF						
R....14	57.11.3223	22 kOhm	1% MF						
R....15	57.11.3682	6.8 kOhm	1% MF						
R....16	57.11.3682	6.8 kOhm	1% MF						
R....17	57.11.3223	22 kOhm	1% MF						
R....18	57.11.3682	6.8 kOhm	1% MF						
R....19	57.11.3682	6.8 kOhm	1% MF						
R....20	57.11.3682	6.8 kOhm	1% MF						
R....21	57.11.3682	6.8 kOhm	1% MF						
R....22	57.11.3682	6.8 kOhm	1% MF						
R....23	57.11.3223	22 kOhm	1% MF						
R....24	57.11.3682	6.8 kOhm	1% MF						
R....25	57.11.3682	6.8 kOhm	1% MF						
R....26	57.11.3682	6.8 kOhm	1% MF						
R....27	57.11.3682	6.8 kOhm	1% MF						
R....28	57.11.3682	6.8 kOhm	1% MF						
R....29	57.11.3682	6.8 kOhm	1% MF						
R....30	57.11.3682	6.8 kOhm	1% MF						
R....31	57.11.3223	22 kOhm	1% MF						
R....32	57.11.3682	6.8 kOhm	1% MF						
R....33	57.11.3682	6.8 kOhm	1% MF						
R....34	57.11.3682	6.8 kOhm	1% MF						
R....35	57.11.3682	6.8 kOhm	1% MF						
R....36	57.11.3223	22 kOhm	1% MF						
R....37	57.11.3682	6.8 kOhm	1% MF						
R....38	57.11.3224	220 kOhm	1% MF						
R....39	57.11.3682	6.8 kOhm	1% MF						
R....40	57.11.3682	6.8 kOhm	1% MF						
R....41	57.11.3682	6.8 kOhm	1% MF						
R....42	57.11.3682	6.8 kOhm	1% MF						
R....43	57.11.3150	15 Ohm	1% MF						
R....44	57.11.3682	6.8 kOhm	1% MF						
R....45	57.11.3682	6.8 kOhm	1% MF						
R....46	57.99.0250	6.8 kOhm	0.1% MF						
R....47	57.99.0250	6.8 kOhm	0.1% MF						
R....48	57.11.3224	220 kOhm	1% MF						
R....49	57.11.3682	6.8 kOhm	1% MF						
R....50	57.11.3682	6.8 kOhm	1% MF						

CER=Ceramic, PE=Polyester  
MF=Metal Film, PMG=Cermet  
MANUFACTURER: Ex=Exar, NEC=Nippon Electric Corp., Ph=Philips, Ra=Raytheon, Sig=Signetics, St=Studer.  
1.917.311.00 SUBCARD FOR C.R./STUDIO MON. SCA88/10/1000

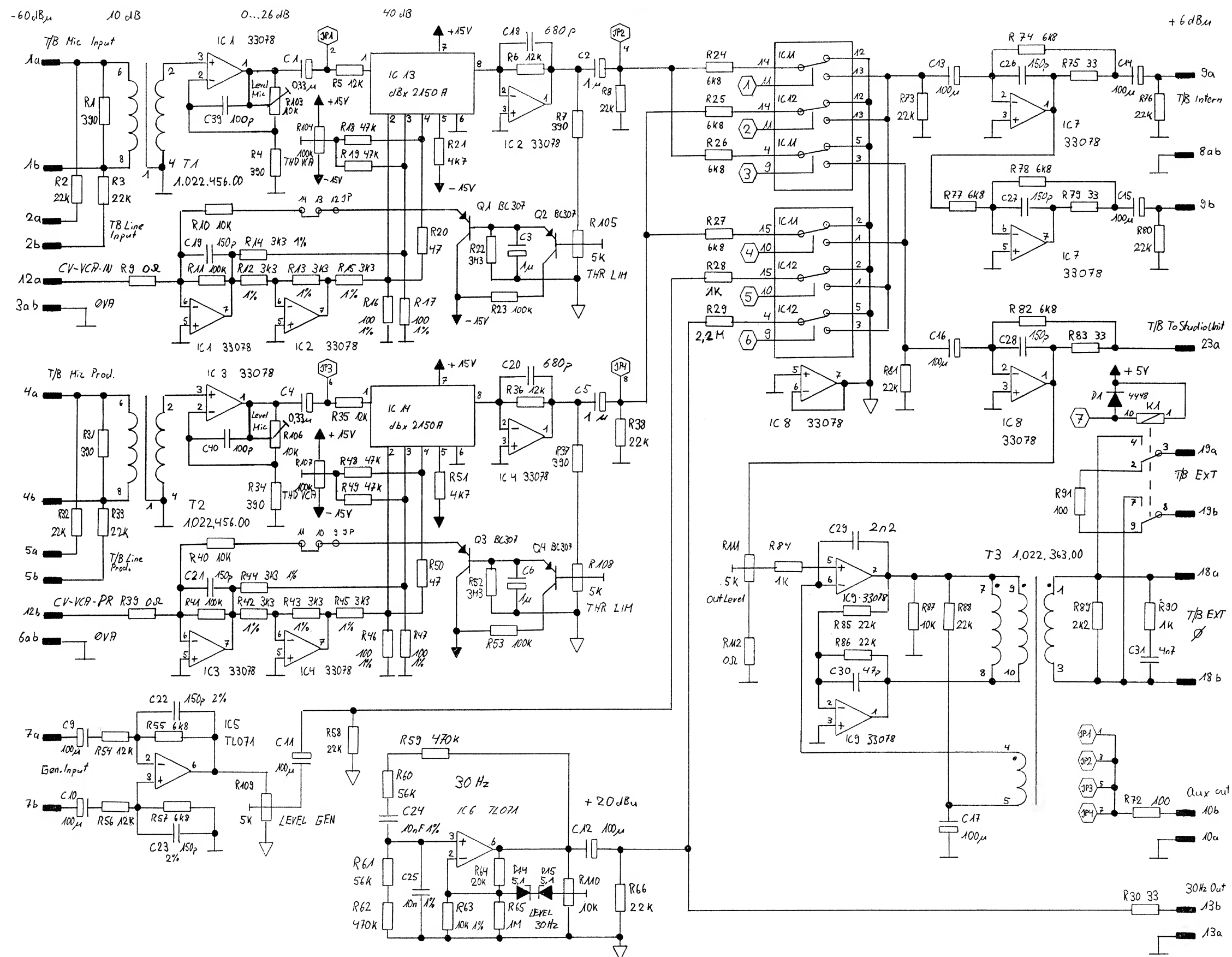
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## Talkback Amplifier 1.917.320.00



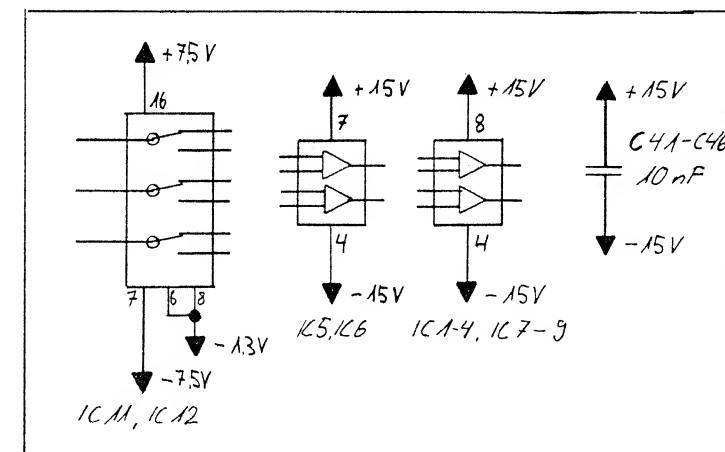
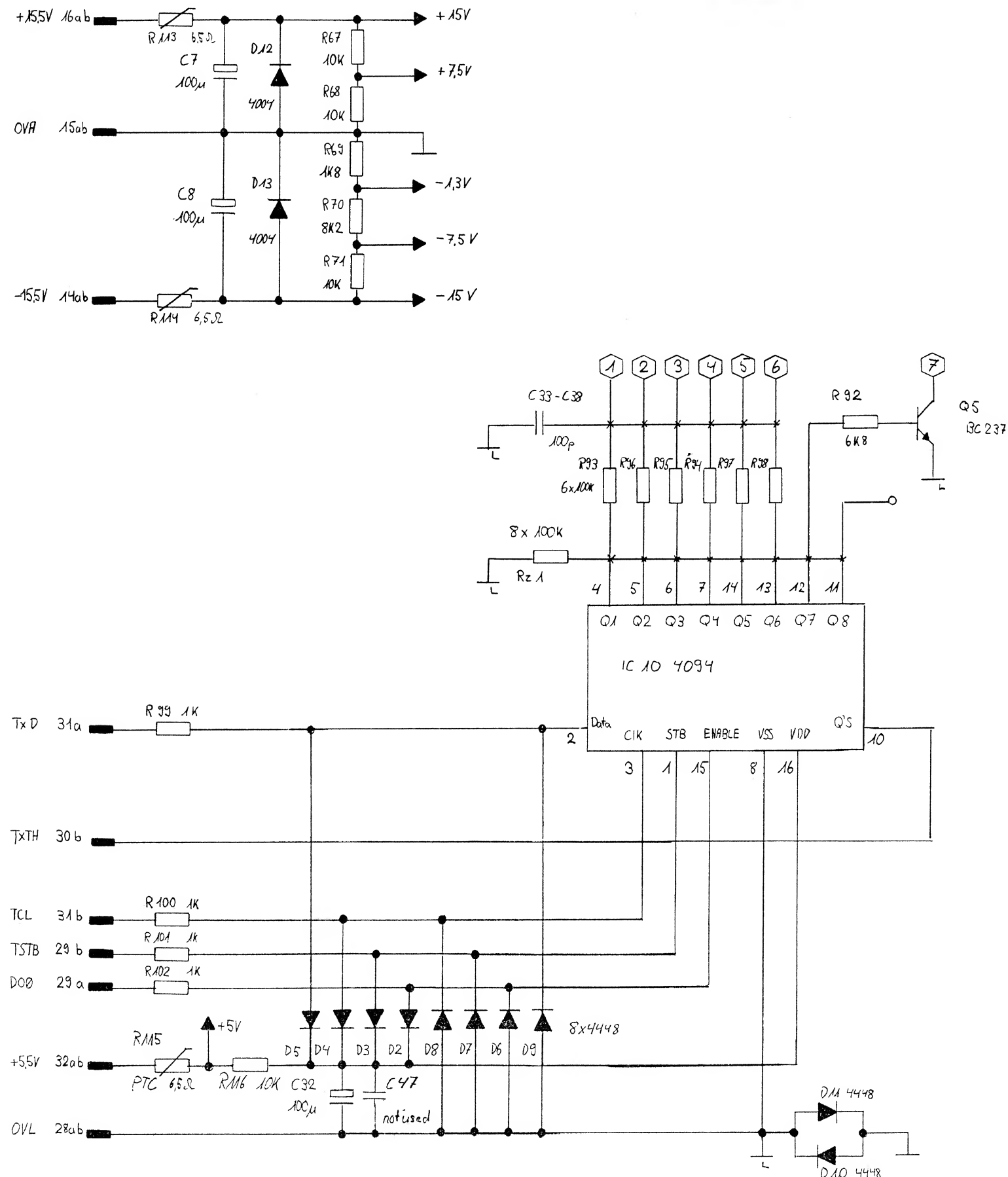
## Talkback Amplifier 1.917.320.00



0 12.06.89 Emi	1 05.11.90 Emi	2 07.02.92 Emi	...	PAGE 1 OF 2	1.917.320.00
STUDER			TALK BACK AMPLIFIER		

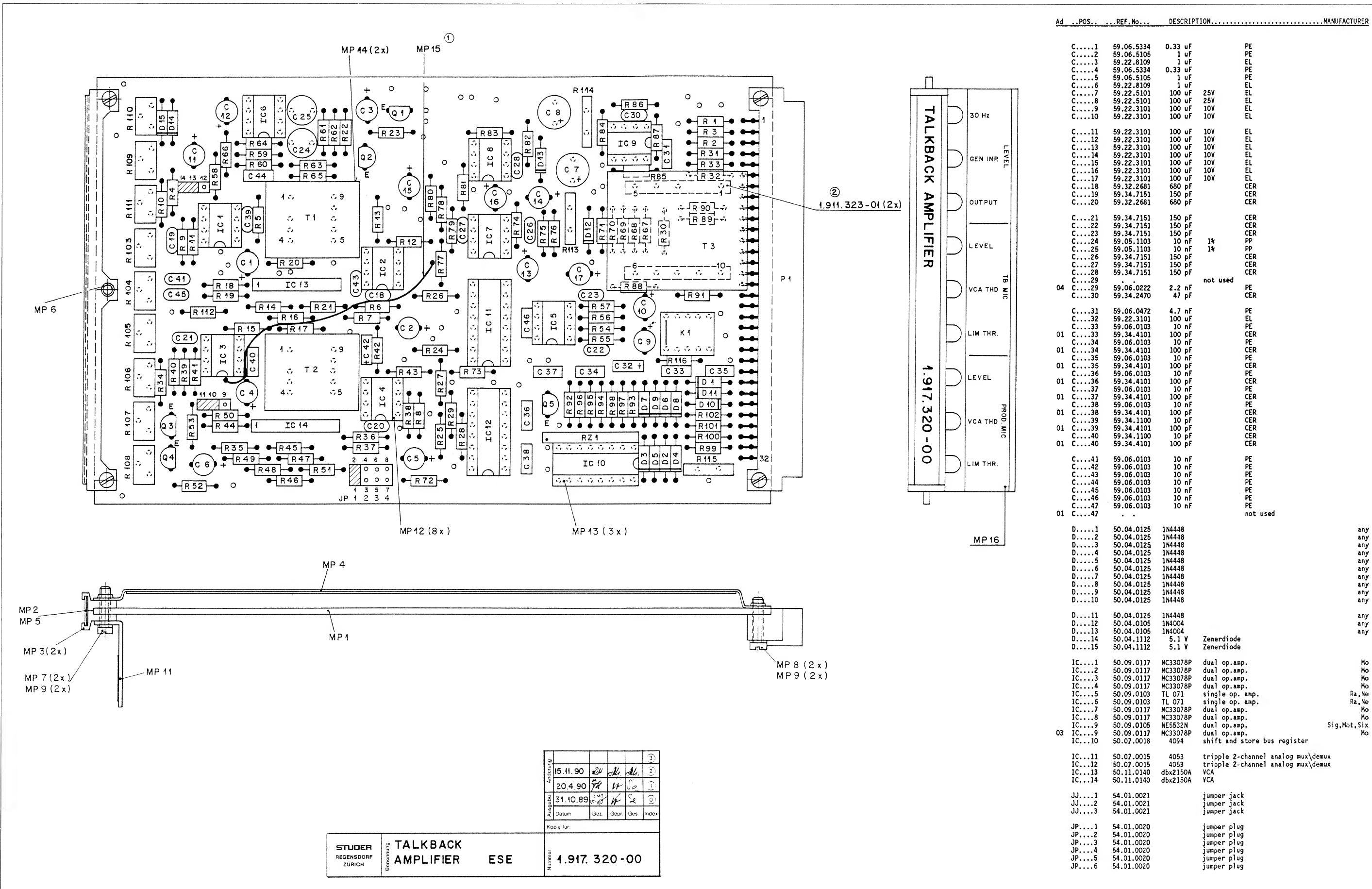


**Talkback Amplifier 1.917.320.00**





Talkback Amplifier 1.917.320.00





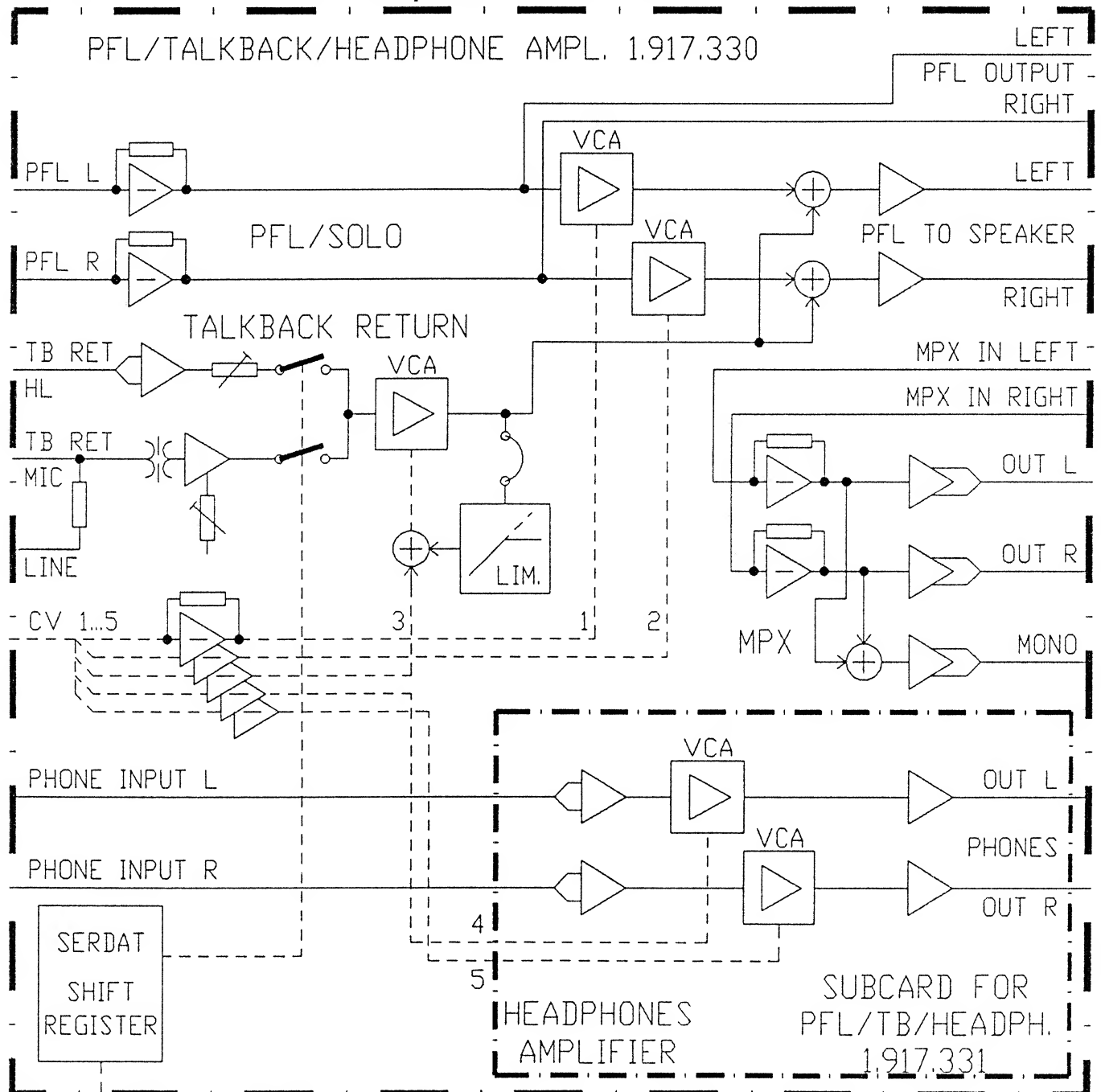
## Talkback Amplifier 1.917.320.00

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER	Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
JP...	7	54.01.0020	jumper plug		R...	74	57.11.3682	6.8 kOhm	
JP...	8	54.01.0020	jumper plug		R...	75	57.11.3330	33 Ohm	
JP...	9	54.01.0020	jumper plug		R...	76	57.11.3223	22 kOhm	
JP...	10	54.01.0020	jumper plug		R...	77	57.11.3682	6.8 kOhm	
JP...	11	54.01.0020	jumper plug		R...	78	57.11.3682	6.8 kOhm	
JP...	12	54.01.0020	jumper plug		R...	79	57.11.3330	33 Ohm	
JP...	13	54.01.0020	jumper plug		R...	80	57.11.3223	22 kOhm	
JP...	14	54.01.0020	jumper plug		R...	81	57.11.3223	22 kOhm	
K....	1	56.04.0195	SDS Relais Type TQ2-6V		R...	82	57.11.3682	6.8 kOhm	
P....	1	54.11.2004	2*32pin euroconnector	Bu	R...	83	57.11.3330	33 Ohm	
Q....	1	50.03.0515	BC307 PNP or equivalent	any	R...	84	57.11.3102	1 kOhm	
Q....	2	50.03.0515	BC307 PNP or equivalent	any	R...	85	57.11.3223	22 kOhm	
Q....	3	50.03.0515	BC307 PNP or equivalent	any	R...	86	57.11.3223	22 kOhm	
Q....	4	50.03.0515	BC307 PNP or equivalent	any	R...	87	57.11.3103	10 kOhm	
Q....	5	50.03.0436	BC237 NPN or equivalent	any	R...	88	57.11.3223	22 kOhm	
R....	1	57.11.3391	390 Ohm		R...	89	57.11.3222	2.2 kOhm	
R....	2	57.11.3223	22 kOhm		R...	90	57.11.3102	1 kOhm	
R....	3	57.11.3223	22 kOhm		R...	91	57.11.3101	100 Ohm	
R....	4	57.11.3391	390 Ohm		R...	92	57.11.3682	6.8 kOhm	
R....	5	57.11.3123	12 kOhm		R...	93	57.11.3104	100 kOhm	
R....	6	57.11.3123	12 kOhm		R...	94	57.11.3104	100 kOhm	
R....	7	57.11.3391	390 Ohm		R...	95	57.11.3104	100 kOhm	
R....	8	57.11.3223	22 kOhm		R...	96	57.11.3104	100 kOhm	
R....	9	57.11.3104	100 kOhm		R...	97	57.11.3104	100 kOhm	
02 R....	9	57.11.3000	0 Ohm		R...	98	57.11.3104	100 kOhm	
R....	10	57.11.3103	10 kOhm		R...	99	57.11.3101	100 Ohm	
R....	11	57.11.3104	100 kOhm		R...	100	57.11.3101	100 Ohm	
R....	12	57.11.3332	3.3 kOhm 1%		R...	101	57.11.3101	100 Ohm	
R....	13	57.11.3332	3.3 kOhm 1%		R...	102	57.11.3101	100 Ohm	
R....	14	57.11.3332	3.3 kOhm 1%		01 R...	103	58.01.9103	10 kOhm trimpot.	CCW
R....	15	57.11.3332	3.3 kOhm 1%		R...	104	58.01.9104	10 kOhm trimpot.	
R....	16	57.11.3101	100 Ohm 1%		R...	105	58.01.9502	5 kOhm trimpot.	
R....	17	57.11.3101	100 Ohm 1%		01 R...	106	58.01.9103	10 kOhm trimpot.	CCW
R....	18	57.11.3473	47 kOhm		R...	107	58.01.9104	100 kOhm trimpot.	
R....	19	57.11.3473	47 kOhm		R...	108	58.01.9502	5 kOhm trimpot.	
R....	20	57.11.3470	47 Ohm		R...	109	58.01.9502	5 kOhm trimpot.	
R....	21	57.11.3472	4.7 kOhm		R...	110	58.01.9103	10 kOhm trimpot.	
R....	22	57.11.5335	3.3 MOhm		01 R...	111	57.11.3103	10 kOhm	
R....	23	57.11.3104	100 kOhm		R...	112	58.01.9502	5 kOhm trimpot.	
R....	24	57.11.3682	6.8 kOhm		R...	113	57.92.1271	0 Ohm	
R....	25	57.11.3682	6.8 kOhm		R...	114	57.92.1271	PTC, 270mA, ca. 6.5 Ohm	
R....	26	57.11.3682	6.8 kOhm		R...	115	57.92.1271	PTC, 270mA, ca. 6.5 Ohm	
R....	27	57.11.3682	6.8 kOhm		R...	116	57.11.3103	10 kOhm	
R....	28	57.11.3222	2.2 kOhm		01 RZ...	1	57.88.4104	100 kOhm 8*100kOhm	
R....	29	57.11.3102	1 kOhm		T....	1	1.022.456.00	input trafo 1:2.24	STUDER
R....	30	57.11.3683	68 kOhm		T....	2	1.022.456.00	input trafo 1:2.24	STUDER
02 R....	29	57.11.5225	2.2 MOhm		06 T....	3	1.022.363.81	trafo	STUDER
R....	31	57.11.3330	33 Ohm		MP...	1	1.917.320.11	1 pcs Print	Studer
R....	32	57.11.3391	390 Ohm		MP...	2	1.917.320.01	1 pcs Bez. Streifen 6.3*91	Studer
R....	33	57.11.3223	22 kOhm		MP...	3	1.010.006.33	2 pcs Griffhaelften	Studer
R....	34	57.11.3391	390 Ohm		MP...	4	1.010.090.49	1 pcs Abschirmblech	Studer
R....	35	57.11.3123	12 kOhm		MP...	5	1.010.096.49	1 pcs Klarsicht Schild	
R....	36	57.11.3123	12 kOhm		MP...	6	28.21.1380	1 pcs Rohrniete D2.5/6	
R....	37	57.11.3391	390 Ohm		05 MP...	6	28.21.1390	1 pcs Rohrniete D 2.25 * 7.0	
R....	38	57.11.3223	22 kOhm		MP...	7	21.01.0280	2 pcs Z - Schraube M2.5*8	
R....	39	57.11.3104	100 kOhm		MP...	8	21.01.0281	2 pcs Z - Schraube M2.5*10	
02 R....	39	57.11.3000	0 Ohm		MP...	9	24.16.1025	4 pcs Rippenscheibe D2.7/5	
R....	40	57.11.3103	10 kOhm		MP...	10	43.01.0108	1 pcs ESE-Warnschild	
R....	41	57.11.3104	100 kOhm		MP...	11	1.915.001.02	1 pcs Winkel fuer Poti	Studer
R....	42	57.11.3332	3.3 kOhm 1%		MP...	12	53.03.0166	9 pcs IC-Sockel 8 Pin	
R....	43	57.11.3332	3.3 kOhm 1%		MP...	13	53.03.0168	3 pcs IC-Sockel 16 Pin	
R....	44	57.11.3332	3.3 kOhm 1%		MP...	14	1.022.400.03	2 pcs Isolation zu Trafo	Studer
R....	45	57.11.3332	3.3 kOhm 1%		01 MP...	15	1.010.112.64	1 pcs Draht isoliert 68mm	
R....	46	57.11.3101	100 Ohm 1%		01 MP...	16	1.917.320.02	1 pcs Schild Potmeterbeschriftung	Studer
R....	47	57.11.3101	100 Ohm 1%						
R....	48	57.11.3473	47 kOhm						
R....	49	57.11.3473	47 kOhm						
R....	50	57.11.3470	47 Ohm						
R....	51	57.11.3472	4.7 kOhm						
R....	52	57.11.5335	3.3 MOhm						
R....	53	57.11.3104	100 kOhm						
R....	54	57.11.3682	6.8 kOhm						
01 R....	54	57.11.3123	12 kOhm						
R....	55	57.11.3682	6.8 kOhm						
R....	56	57.11.3682	6.8 kOhm						
01 R....	56	57.11.3123	12 kOhm						
R....	57	57.11.3682	6.8 kOhm						
R....	58	57.11.3223	22 kOhm						
R....	59	57.11.3474	470 kOhm						
R....	60	57.11.3563	56 kOhm						
R....	61	57.11.3563	56 kOhm						
R....	62	57.11.3474	470 kOhm						
R....	63	57.11.3103	10 kOhm 1%						
R....	64	57.11.3203	20 kOhm 1%						
R....	65	57.11.3105	1 MOhm						
R....	66	57.11.3223	22 kOhm						
R....	67	57.11.3103	10 kOhm						
R....	68	57.11.3103	10 kOhm						
R....	69	57.11.3182	1.8 kOhm						
R....	70	57.11.3822	8.2 kOhm						
R....	71	57.11.3103	10 kOhm						
R....	72	57.11.3101	100 Ohm						
R....	73	57.11.3223	22 kOhm						

## Pin Location List

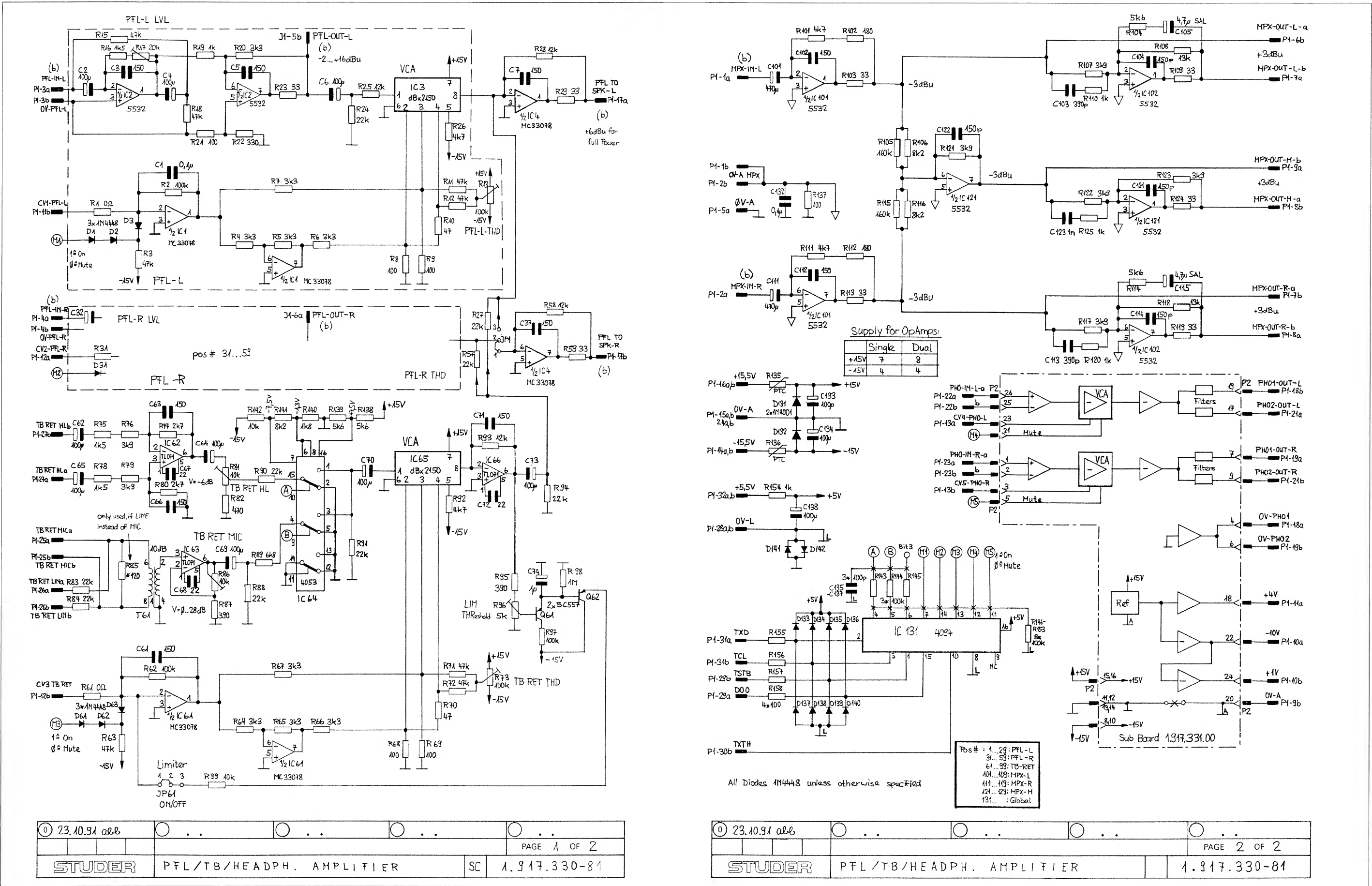
## Talkback Amplifier 1.917.320.00

P	NO	NAME	REMARK	B=BUS O=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC	
-----			-----		
P1	01A	TB-MIC -IN-a	TALKBACK MIC INPUT a	0,S	
P1	01B	TB-MIC -IN-b	TALKBACK MIC INPUT b	0,S	
P1	02A	TB-LINE-IN-a	TALKBACK LINE INPUT a	0,S	
P1	02B	TB-LINE-IN-b	TALKBACK LINE INPUT b	0,S	
P1	03	0V-A	GROUND AUDIO		X X
P1	04A	TB-MIC -PR-a	TALKBACK MIC PRODUCER a	0,S	
P1	04B	TB-MIC -PR-b	TALKBACK MIC PRODUCER b	0,S	
P1	05A	TB-LINE-PR-a	TALKBACK LINE PRODUCER a	0,S	
P1	05B	TB-LINE-PR-b	TALKBACK LINE PRODUCER b	0,S	
P1	06	0V-A	GROUND AUDIO		X X
P1	07A	OSZ-IN-a	OSZILATOR INPUT a	0,S	
P1	07B	OSZ-IN-b	OSZILATOR INPUT b	0,S	
P1	08	0V-A	GROUND AUDIO TALKBACK INTERN		X X
P1	09A	TB-INT-a	OUTPUT ; TALKBACK INTERN a	0,S	
P1	09B	TB-INT-b	OUTPUT ; TALKBACK INTERN b	0,S	
P1	10A	0V-A	GROUND AUDIO		X X
P1	10B	AUX-OUT	AUX OUTPUT	0,AS	
P1	11A	-	N.C.		
P1	11B	-	N.C.		
P1	12A	CV-VCA-IN	CONTROL VOLTAGE VCA INPUT		
P1	12B	CV-VCA-PR	CONTROL VOLTAGE VCA PRODUCER		
P1	13A	0V-A	GROUND AUDIO		
P1	13B	30HZ-OUT	30HZ OUTPUT	0,AS	
P1	14	- 15.5V	- SUPPLY	B	X X
P1	15	0V-A	GROUND AUDIO	B	X X
P1	16	+ 15.5V	+ SUPPLY	B	X X
P1	17	0V-A	GROUND AUDIO		X X
P1	18A	TB-EXT-0-a	OUTPUT ; TALKBACK EXTERN 0 a	0,S	
P1	18B	TB-EXT-0-b	OUTPUT ; TALKBACK EXTERN 0 b	0,S	
P1	19A	TB-EXT-1-a	OUTPUT ; TALKBACK EXTERN 1 a	0,S	
P1	19B	TB-EXT-1-b	OUTPUT ; TALKBACK EXTERN 1 b	0,S	
P1	20A	-	N.C.		
P1	20B	-	N.C.		
P1	21A	-	N.C.		
P1	21B	-	N.C.		
P1	22A	-	N.C.		
P1	22B	-	N.C.		
P1	23A	TB TO STUDIO	OUTPUT ; TALKBACK TO STUDIO	0,S	
P1	23B	-	N.C.		
P1	24A	-	N.C.		
P1	24B	-	N.C.		
P1	25A	-	N.C.		
P1	25B	-	N.C.		
P1	26A	-	N.C.		
P1	26B	-	N.C.		
P1	27A	-	N.C.		
P1	27B	-	N.C.		
P1	28	0V-L	GROUND SIGN (LOGIC)	B	X X
P1	29A	DO 0	DATA OUT 0 (ENABLE)		
P1	29B	TSTB 4	TRANSMIT STROBE 4		
P1	30A	-	RES		
P1	30B	TXTH	TRANSMIT DATA THROUGH		
P1	31A	TXD	TRANSMIT DATA		
P1	31B	TCL	TRANSMIT CLOCK		
P1	32	+ 5.5V	+ SUPPLY	B	X X

**PFL / Talkback Headphone Amplifier 1.917.330.81****Subcard for PFL / Talkback Headphone 1.917.331.00**

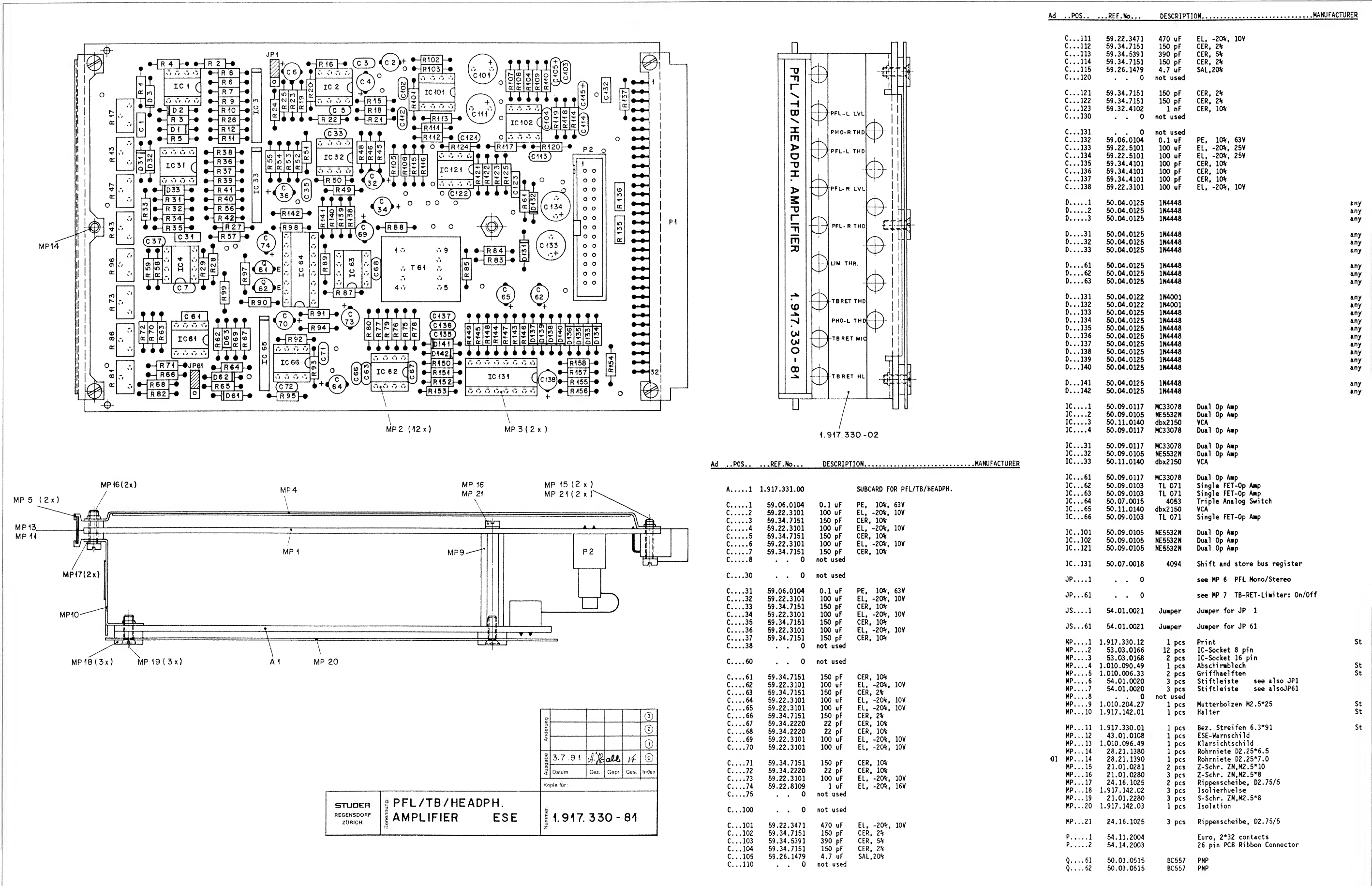


PFL / Talkback Headphone Amplifier 1.917.330.81





PFL / Talkback Headphone Amplifier 1.917.330.81



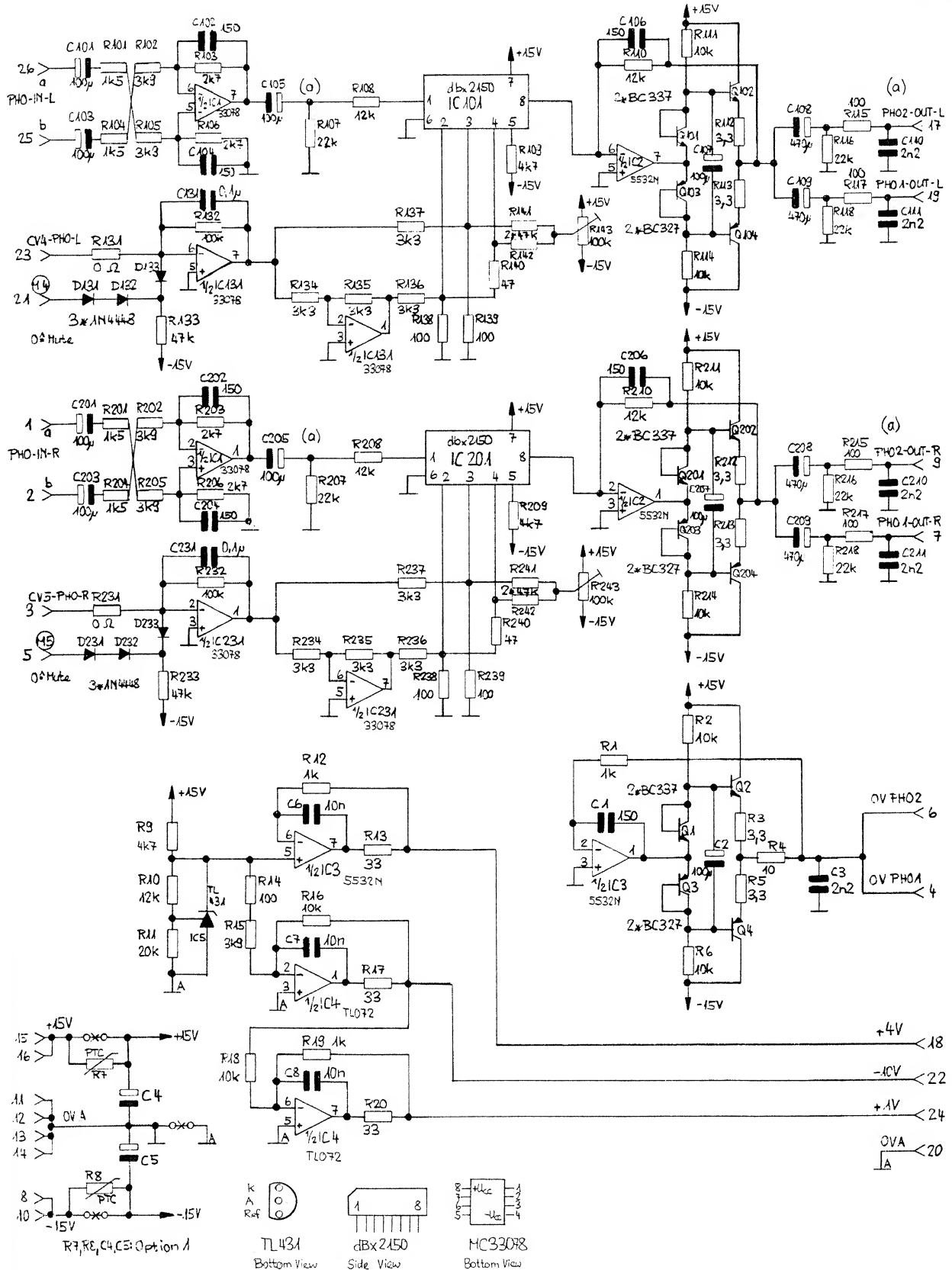
## Pin Location List

## PFL / Talkback Headphone Amplifier I.917.330.81

P	NO	NAME	REMARK	B=BUS O=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC
-----			-----	-----
P1	01A	MPX-IN-L	MULTIPLEX INPUT LEFT	O,AS
P1	01B	0V-A MPX	GROUND AUDIO MPX	O
P1	02A	MPX-IN-R	MULTIPLEX INPUT RIGHT	O,AS
P1	02B	0V-A MPX	GROUND AUDIO MPX	O
P1	03A	PFL-IN-L	PFL INPUT LEFT	O,AS
P1	03B	0V PFL-L	GROUND AUDIO PFL LEFT	O
P1	04A	PFL-IN-R	PFL INPUT RIGHT	O,AS
P1	04B	0V PFL-R	GROUND AUDIO PFL RIGHT	O
P1	05A	0V-A	GROUND AUDIO	
P1	05B	PFL-OUT-L	PFL OUTPUT LEFT	O,AS
P1	06A	PFL-OUT-R	PFL OUTPUT RIGHT	O,AS
P1	06B	MPX-OUT-L-a	MULTIPLEX OUTPUT LEFT a	O,S
P1	07A	MPX-OUT-L-b	MULTIPLEX OUTPUT LEFT b	O,S
P1	07B	MPX-OUT-R-a	MULTIPLEX OUTPUT RIGHT a	O,S
P1	08A	MPX-OUT-R-b	MULTIPLEX OUTPUT RIGHT b	O,S
P1	08B	MPX-OUT-M-a	MULTIPLEX OUTPUT MASTER a	O,S
P1	09A	MPX-OUT-M-b	MULTIPLEX OUTPUT MASTER b	O,S
P1	09B	0V-A	GROUND AUDIO	
P1	10A	-10V	CONTROL VOLTAGE VCA	
P1	10B	+1V	CONTROL VOLTAGE VCA	
P1	11A	+4V	CONTROL VOLTAGE VCA	
P1	11B	CV 1-PFL-L	CTRL.VOLTAGE VCA 1 PFL LEFT	
P1	12A	CV 2-PFL-R	CTRL.VOLTAGE VCA 2 PFL RIGHT	
P1	12B	CV 3-TB RET	CTRL.VOLTAGE VCA 3 TB RETURN	
P1	13A	CV 4-PHO-L	CTRL.VOLTAGE VCA 4 PHONE L	
P1	13B	CV 5-PHO-R	CTRL.VOLTAGE VCA 5 PHONE R	
P1	14	- 15.5V	- SUPPLY	B X X
P1	15	0V-A	GROUND AUDIO	B X X
P1	16	+ 15.5V	+ SUPPLY	B X X
P1	17A	PFL TO SPK-L	PFL TO SPEAKER LEFT	O,AS
P1	17B	PFL TO SPK-R	PFL TO SPEAKER RIGHT	O,AS
P1	18A	0V-PHO1	GROUND AUDIO PHONE 1	O
P1	18B	PHO1-OUT-L	PHONE 1 OUTPUT LEFT	O,AS
P1	19A	PHO1-OUT-R	PHONE 1 OUTPUT RIGHT	O,AS
P1	19B	0V PHO2	GROUND AUDIO PHONE 2	O
P1	20A	-	RES	
P1	20B	-	RES	
P1	21A	PHO2-OUT-L	PHONE 2 OUTPUT LEFT	O,AS
P1	21B	PHO2-OUT-R	PHONE 2 OUTPUT RIGHT	O,AS
P1	22A	PHO-IN-L-a	PHONE INPUT LEFT a	O,S
P1	22B	PHO-IN-L-b	PHONE INPUT LEFT b	O,S
P1	23A	PHO-IN-R-a	PHONE INPUT RIGHT a	O,S
P1	23B	PHO-IN-R-b	PHONE INPUT RIGHT b	O,S
P1	24	0V-A	GROUND AUDIO	B X X
P1	25A	TB RET MIC-a	TALKBACK RETURN MIC a	O,S
P1	25B	TB RET MIC-b	TALKBACK RETURN MIC b	O,S
P1	26A	TB RET LIN-a	TALKBACK RETURN LINE a	O,S
P1	26B	TB RET LIN-b	TALKBACK RETURN LINE b	O,S
P1	27A	TB RET HL-a	TALKBACK RETURN HIGH LEVEL a	O,S
P1	27B	TB RET HL-b	TALKBACK RETURN HIGH LEVEL b	O,S
P1	28	0V-L	GROUND SIGN (LOGIC)	B X X
P1	29A	DO 0	DATA OUT 0 (ENABLE)	
P1	29B	TSTB	TRANSMIT STROBE	
P1	30A	-	RES	
P1	30B	TXTH	TRANSMIT DATA THROUGH	
P1	31A	TXD	TRANSMIT DATA	
P1	31B	TCL	TRANSMIT CLOCK	
P1	32	+ 5.5V	+ SUPPLY	B X X



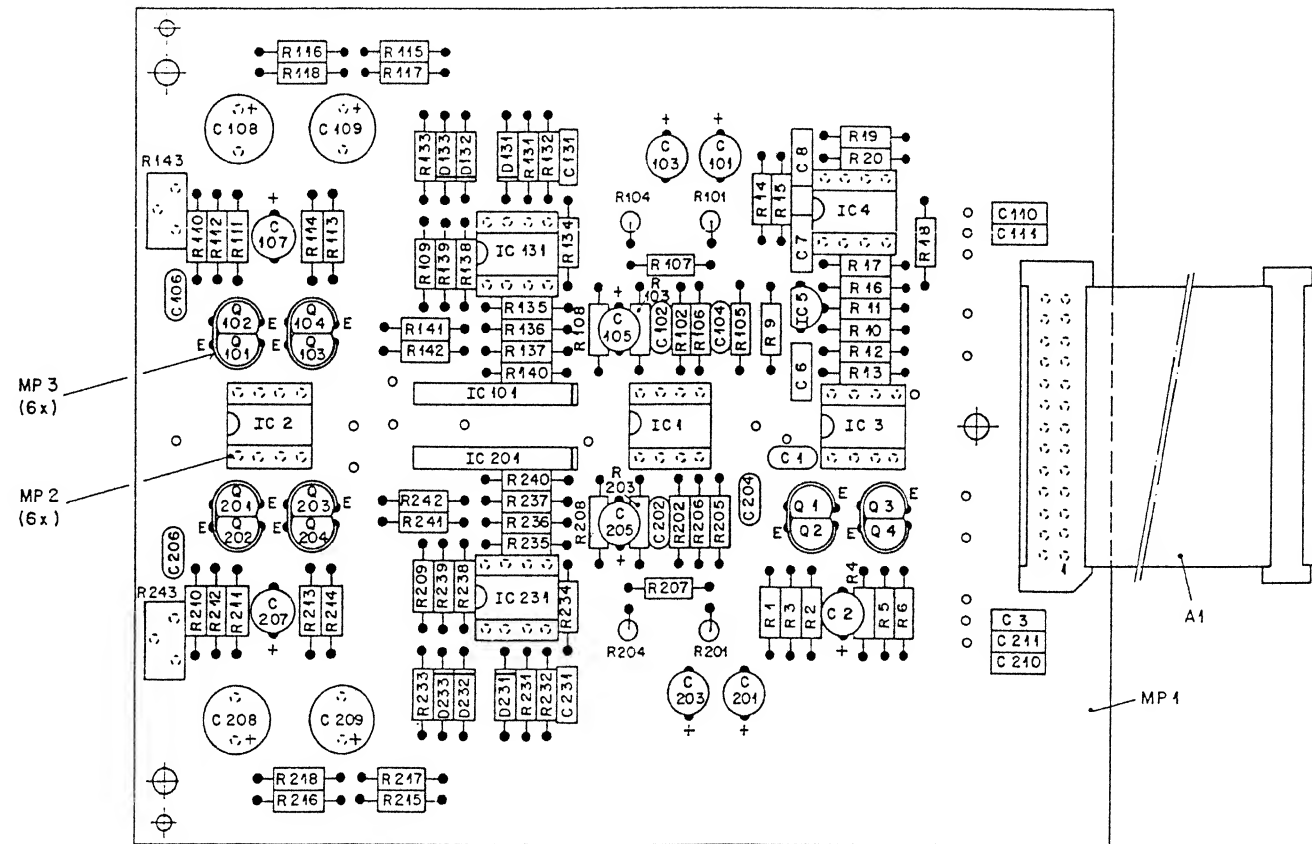
## Subcard for PFL / Talkback Headphone 1.917.331.00



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STUDER			SUBCARD FOR PFL/TB HEADPH.	SC 1.917.331.00
			PAGE 1 OF 1	

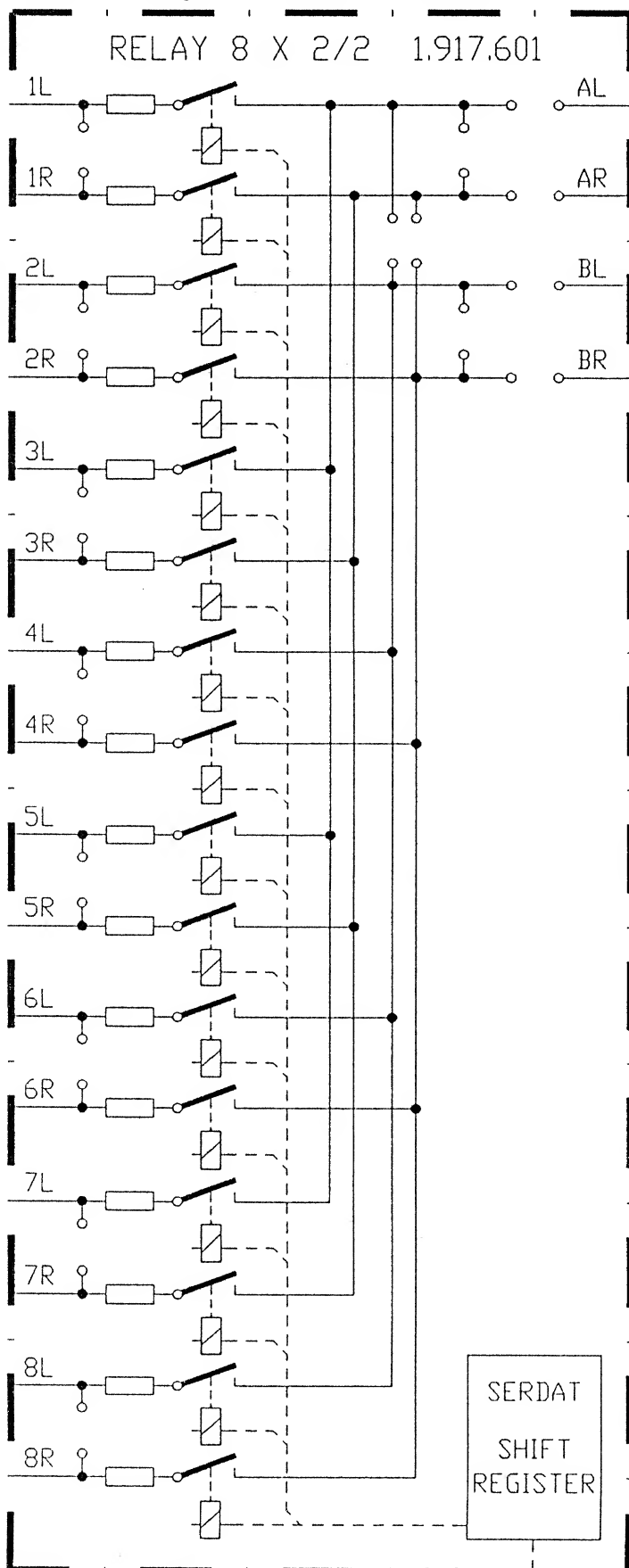


**Subcard for PFL / Talkback Headphone 1.917.331.00**

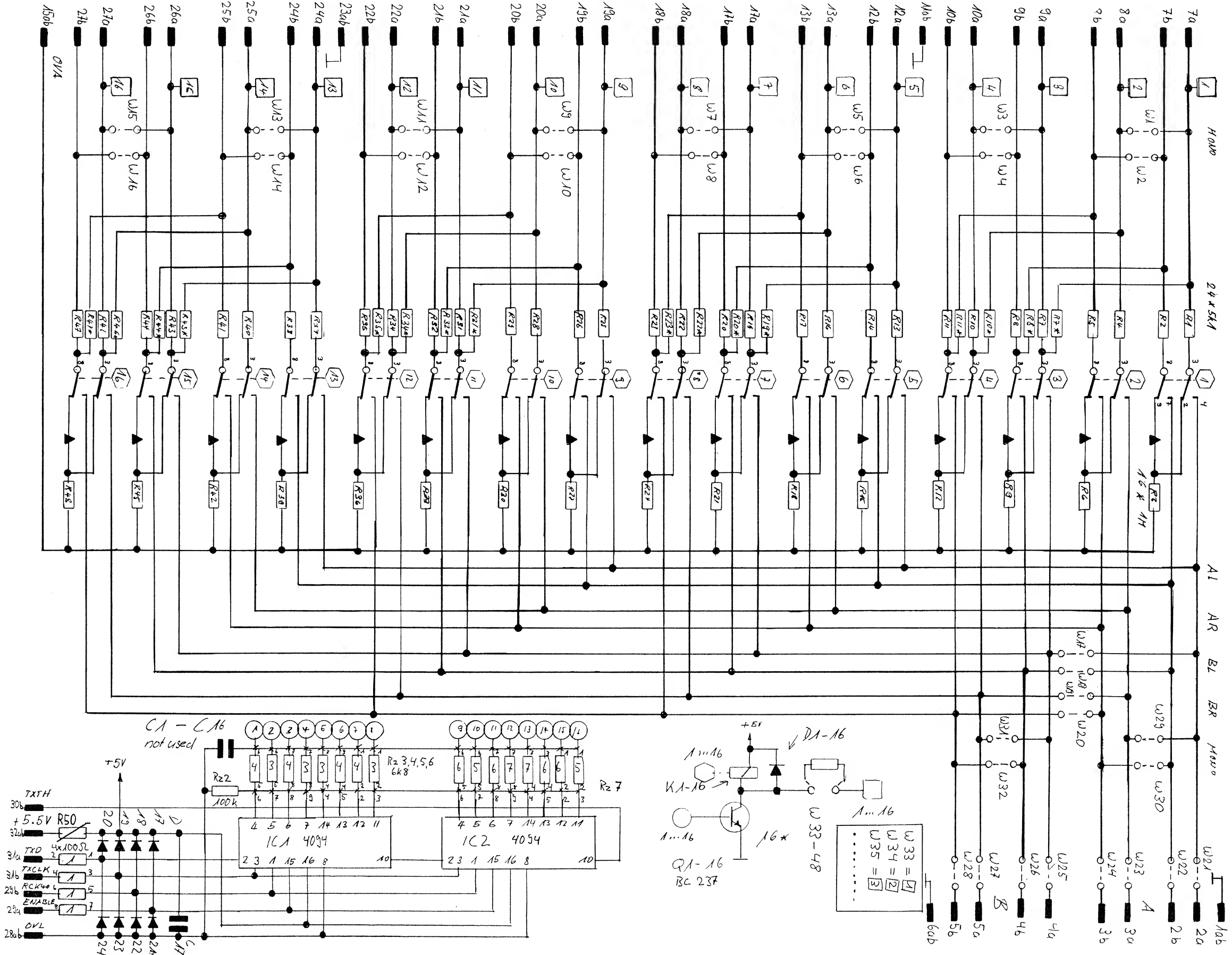


STUDER REGENSDORF ZÜRICH	Benennung: SUBCARD FOR PFL/TB HEADPH. ESE	Kopie für: Nummer: 1.917.331-00
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Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER	Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
A....1	1.023.112.01		Flachkabel konf. 26-pol		R...101	57.11.3152	1.5 kOhm	2 %	
C....1	59.34.7151	150 pF	CER, 10%		R...102	57.11.3392	3.9 kOhm	2 %	
C....2	59.22.3101	100 uF	EL, -20%, 10V		R...103	57.11.3272	2.7 kOhm	2 %	
C....3	59.06.0222	2.2 nF	PE, 10%, 63V		R...104	57.11.3152	1.5 kOhm	2 %	
C....4		100 uF	EL, -20%, 25V	59.22.5101	R...105	57.11.3392	3.9 kOhm	2 %	
C....5		100 uF	EL, -20%, 25V	59.22.5101	R...106	57.11.3272	2.7 kOhm	2 %	
C....6	59.06.0103	10 nF	PE, 10%, 63V	Option 1	R...107	57.11.3223	22 kOhm	10 %	
C....7	59.06.0103	10 nF	PE, 10%, 63V	Option 1	R...108	57.11.3123	12 kOhm	2 %	
C....8	59.06.0103	10 nF	PE, 10%, 63V		R...109	57.11.3472	4.7 kOhm	10 %	
					R...110	57.11.3123	12 kOhm	2 %	
C...101	59.22.3101	100 uF	EL, -20%, 10V		R...111	57.11.3103	10 kOhm	10 %	
C...102	59.34.7151	150 pF	CER, 2%		R...112	57.11.3339	3.3 kOhm	10 %	
C...103	59.22.3101	100 uF	EL, -20%, 10V		R...113	57.11.3339	3.3 kOhm	10 %	
C...104	59.34.7151	150 pF	CER, 2%		R...114	57.11.3103	10 kOhm	10 %	
C...105	59.22.3101	100 uF	EL, -20%, 10V		R...115	57.11.3101	100 Ohm	10 %	
C...106	59.34.7151	150 pF	CER, 10%		R...116	57.11.3223	22 kOhm	10 %	
C...107	59.22.3101	100 uF	EL, -20%, 10V		R...117	57.11.3101	100 Ohm	10 %	
C...108	59.22.3471	470 uF	EL, -20%, 10V		R...118	57.11.3223	22 kOhm	10 %	
C...109	59.22.3471	470 uF	EL, -20%, 10V						
C...110	59.06.0222	2.2 nF	PE, 10%, 63V		R...131	57.11.3000	0 Ohm		Wiring Bridge
C...111	59.06.0222	2.2 nF	PE, 10%, 63V		R...132	57.11.3104	100 kOhm	1 %	
C...131	59.06.0104	0.1 uF	PE, 10%, 63V		R...133	57.11.3473	47 kOhm	10 %	
C...201	59.22.3101	100 uF	EL, -20%, 10V		R...134	57.11.3332	3.3 kOhm	1 %	
C...202	59.34.7151	150 pF	CER, 2%		R...135	57.11.3332	3.3 kOhm	1 %	
C...203	59.22.3101	100 uF	EL, -20%, 10V		R...136	57.11.3332	3.3 kOhm	1 %	
C...204	59.34.7151	150 pF	CER, 2%		R...137	57.11.3332	3.3 kOhm	1 %	
C...205	59.22.3101	100 uF	EL, -20%, 10V		R...138	57.11.3101	100 Ohm	1 %	
C...206	59.34.7151	150 pF	CER, 10%		R...139	57.11.3101	100 Ohm	1 %	
C...207	59.22.3101	100 uF	EL, -20%, 10V		R...140	57.11.3470	47 Ohm	10 %	
C...208	59.22.3471	470 uF	EL, -20%, 10V		R...141	57.11.3473	47 kOhm	10 %	
C...209	59.22.3471	470 uF	EL, -20%, 10V		R...142	57.11.3473	47 kOhm	10 %	
C...210	59.06.0222	2.2 nF	PE, 10%, 63V		R...143	58.01.9104	100 kOhm	10 %	variable resistor
C...211	59.06.0222	2.2 nF	PE, 10%, 63V		R...201	57.11.3152	1.5 kOhm	2 %	
C...231	59.06.0104	0.1 uF	PE, 10%, 63V		R...202	57.11.3392	3.9 kOhm	2 %	
D...131	50.04.0125	1N4448		any	R...203	57.11.3272	2.7 kOhm	2 %	
D...132	50.04.0125	1N4448		any	R...204	57.11.3152	1.5 kOhm	2 %	
D...133	50.04.0125	1N4448		any	R...205	57.11.3392	3.9 kOhm	2 %	
D...231	50.04.0125	1N4448		any	R...206	57.11.3272	2.7 kOhm	2 %	
D...232	50.04.0125	1N4448		any	R...207	57.11.3223	22 kOhm	10 %	
D...233	50.04.0125	1N4448		any	R...208	57.11.3123	12 kOhm	2 %	
					R...209	57.11.3472	4.7 kOhm	10 %	
					R...210	57.11.3123	12 kOhm	2 %	
IC...1	50.09.0117	MC33078	Dual Op Amp		R...211	57.11.3103	10 kOhm	10 %	
IC...2	50.09.0117	MC33078	Dual Op Amp		R...212	57.11.3339	3.3 kOhm	10 %	
IC...2	50.09.0105	NE5532N	Dual Op Amp		R...213	57.11.3339	3.3 kOhm	10 %	
IC...3	50.09.0117	MC33078	Dual Op Amp		R...214	57.11.3103	10 kOhm	10 %	
IC...3	50.09.0105	NE5532N	Dual Op Amp		R...215	57.11.3101	100 Ohm	10 %	
IC...4	50.09.0117	MC33078	Dual Op Amp		R...216	57.11.3223	22 kOhm	10 %	
IC...4	50.09.0101	TL 072	Dual FET-Op Amp		R...217	57.11.3101	100 Ohm	10 %	
IC...5	50.10.0106	TL431C	Shunt Regulator		R...218	57.11.3223	22 kOhm	10 %	
IC...101	50.11.0140	dbx2150	VCA		R...231	57.11.3000	0 Ohm		Wiring Bridge
IC...131	50.09.0117	MC33078	Dual Op Amp		R...232	57.11.3104	100 kOhm	1 %	
IC...201	50.11.0140	dbx2150	VCA		R...233	57.11.3473	47 kOhm	10 %	
IC...231	50.09.0117	MC33078	Dual Op Amp		R...234	57.11.3332	3.3 kOhm	1 %	
					R...235	57.11.3332	3.3 kOhm	1 %	
					R...236	57.11.3332	3.3 kOhm	1 %	
					R...237	57.11.3332	3.3 kOhm	1 %	
					R...238	57.11.3101	100 Ohm	1 %	
					R...239	57.11.3101	100 Ohm	1 %	
					R...240	57.11.3470	47 Ohm	10 %	
MP...1	1.917.331.11	1 pcs	Print		R...241	57.11.3473	47 kOhm	10 %	
MP...2	53.03.0166	6 pcs	IC-Socket 8 pin		R...242	57.11.3473	47 kOhm	10 %	
MP...3	50.20.2001	6 pcs	Transistor-Clip		R...243	58.01.9104	100 kOhm	10 %	variable resistor
Q....1	50.03.0516	BC 337	NPN	any					
Q....2	50.03.0516	BC 337	NPN	any	(01) 90/12/04	Better output performance. IC 2,3,4 changed			
Q....3	50.03.0625	BC 327	PNP	any	Option 1 :	for standalone headphone-amplifier			
Q....4	50.03.0625	BC 327	PNP	any					
Q...101	50.03.0516	BC 337	NPN	any	Global or both:	Pos No	1...		
Q...102	50.03.0516	BC 337	NPN	any	Left channel :	Pos No	101...		
Q...103	50.03.0625	BC 327	PNP	any	Right channel :	Pos No	201...		
Q...104	50.03.0625	BC 327	PNP	any					
Q...201	50.03.0516	BC 337	NPN	any	CER=Ceramic, EL=Electrolytic, PE=Polyester				
Q...202	50.03.0516	BC 337	NPN	any					
Q...203	50.03.0625	BC 327	PNP	any	MANUFACTURER: TI=Texas Instrument, St=Studer				
Q...204	50.03.0625	BC 327	PNP	any					
R....1	57.11.3102	1 kOhm	10 %		1.917.331.00	SUBCARD FOR PFL/TB/HEADPH.		AB 89/09/2900	
R....2	57.11.3103	10 kOhm	10 %		1.917.331.00	SUBCARD FOR PFL/TB/HEADPH.		AB 90/12/0401	
R....3	57.11.3339	3.3 Ohm	10 %						
R....4	57.11.3100	10 Ohm	10 %		END				
R....5	57.11.3339	3.3 Ohm	10 %						
R....6	57.11.3103	10 kOhm	10 %						
R....7		0.5 Ohm	PTC, 0.5 A	57.92.7013	Option 1				
R....8		0.5 Ohm	PTC, 0.5 A	57.92.7013	Option 1				
R....9	57.11.3472	4.7 kOhm	2 %						
R....10	57.11.3123	12 kOhm	2 %						
R....11	57.11.3203	20 kOhm	2 %						
R....12	57.11.3102	1 kOhm	2 %						
R....13	57.11.3330	33 Ohm	10 %						
R....14	57.11.3101	100 Ohm	2 %						
R....15	57.11.3392	3.9 kOhm	2 %						
R....16	57.11.3103	10 kOhm	2 %						
R....17	57.11.3330	33 Ohm	10 %						
R....18	57.11.3103	10 kOhm	2 %						
R....19	57.11.3102	1 kOhm	2 %						
R....20	57.11.3330	33 Ohm	10 %						

**Monitor Relays Unit 8x2/2 1.917.601.00**

Monitor Relays Unit 8x2/2 1.917.601.00

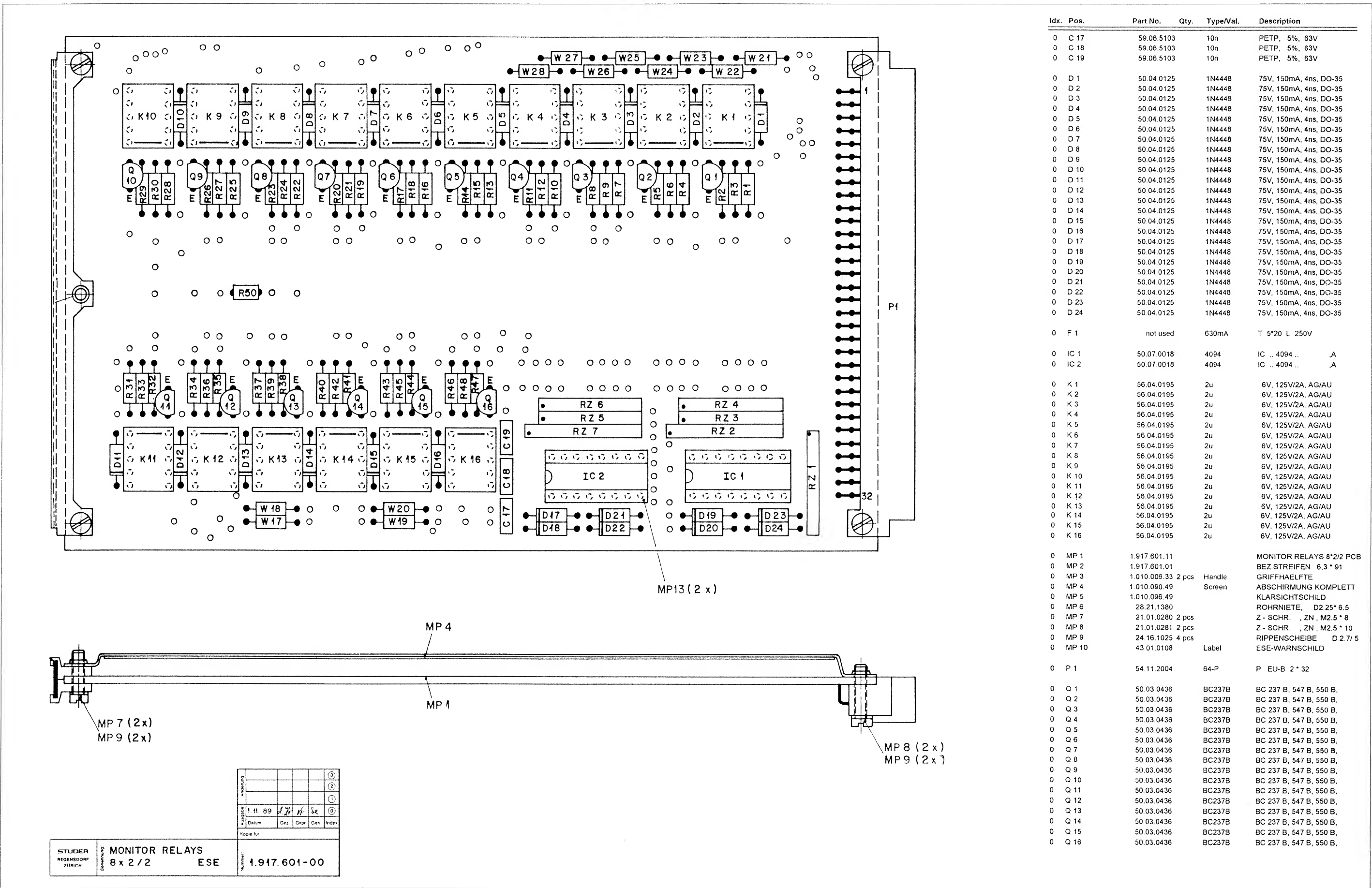


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STUDER	MONITOR RELAYS UNIT 8x2/2	PAGE 1 OF 1





Monitor Relays Unit 8x2/2 1.917.601.00





## Monitor Relays Unit 8x2/2 1.917.601.00

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 1	57.11.3512	5k1	MF, 1%, 0207		0	W 26	57.11.3000	0R0	MF, 0207	
0	R 2	57.11.3512	5k1	MF, 1%, 0207		0	W 27	57.11.3000	0R0	MF, 0207	
0	R 3	57.11.3105	1M0	MF, 1%, 0207		0	W 28	57.11.3000	0R0	MF, 0207	
0	R 4	57.11.3512	5k1	MF, 1%, 0207		0	W 29	not used	0R0	MF, 0207	
0	R 5	57.11.3512	5k1	MF, 1%, 0207		0	W 30	not used	0R0	MF, 0207	
0	R 6	57.11.3105	1M0	MF, 1%, 0207		0	W 31	not used	0R0	MF, 0207	
0	R 7	57.11.3512	5k1	MF, 1%, 0207		0	W 32	not used	0R0	MF, 0207	
0	R 8	57.11.3512	5k1	MF, 1%, 0207		0	W 33	not used	0R0	MF, 0207	
0	R 9	57.11.3105	1M0	MF, 1%, 0207		0	W 34	not used	0R0	MF, 0207	
0	R 10	57.11.3512	5k1	MF, 1%, 0207		0	W 35	not used	0R0	MF, 0207	
0	R 11	57.11.3512	5k1	MF, 1%, 0207		0	W 36	not used	0R0	MF, 0207	
0	R 12	57.11.3105	1M0	MF, 1%, 0207		0	W 37	not used	0R0	MF, 0207	
0	R 13	57.11.3512	5k1	MF, 1%, 0207		0	W 38	not used	0R0	MF, 0207	
0	R 14	57.11.3512	5k1	MF, 1%, 0207		0	W 39	not used	0R0	MF, 0207	
0	R 15	57.11.3105	1M0	MF, 1%, 0207		0	W 40	not used	0R0	MF, 0207	
0	R 16	57.11.3512	5k1	MF, 1%, 0207		0	W 41	not used	0R0	MF, 0207	
0	R 17	57.11.3512	5k1	MF, 1%, 0207		0	W 42	not used	0R0	MF, 0207	
0	R 18	57.11.3105	1M0	MF, 1%, 0207		0	W 43	not used	0R0	MF, 0207	
0	R 19	57.11.3512	5k1	MF, 1%, 0207		0	W 44	not used	0R0	MF, 0207	
0	R 20	57.11.3512	5k1	MF, 1%, 0207		0	W 45	not used	0R0	MF, 0207	
0	R 21	57.11.3105	1M0	MF, 1%, 0207		0	W 46	not used	0R0	MF, 0207	
0	R 22	57.11.3512	5k1	MF, 1%, 0207		0	W 47	not used	0R0	MF, 0207	
0	R 23	57.11.3512	5k1	MF, 1%, 0207		0	W 48	not used	0R0	MF, 0207	
0	R 24	57.11.3105	1M0	MF, 1%, 0207		0	XIC 13	53.03.0168 2 pcs	16p	DIL 0.3", löt, gerade	
0	R 25	57.11.3512	5k1	MF, 1%, 0207							
0	R 26	57.11.3512	5k1	MF, 1%, 0207							
0	R 27	57.11.3105	1M0	MF, 1%, 0207							
0	R 28	57.11.3512	5k1	MF, 1%, 0207							
0	R 29	57.11.3512	5k1	MF, 1%, 0207							
0	R 30	57.11.3105	1M0	MF, 1%, 0207							
0	R 31	57.11.3512	5k1	MF, 1%, 0207							
0	R 32	57.11.3512	5k1	MF, 1%, 0207							
0	R 33	57.11.3105	1M0	MF, 1%, 0207							
0	R 34	57.11.3512	5k1	MF, 1%, 0207							
0	R 35	57.11.3512	5k1	MF, 1%, 0207							
0	R 36	57.11.3105	1M0	MF, 1%, 0207							
0	R 37	57.11.3512	5k1	MF, 1%, 0207							
0	R 38	57.11.3512	5k1	MF, 1%, 0207							
0	R 39	57.11.3105	1M0	MF, 1%, 0207							
0	R 40	57.11.3512	5k1	MF, 1%, 0207							
0	R 41	57.11.3512	5k1	MF, 1%, 0207							
0	R 42	57.11.3105	1M0	MF, 1%, 0207							
0	R 43	57.11.3512	5k1	MF, 1%, 0207							
0	R 44	57.11.3512	5k1	MF, 1%, 0207							
0	R 45	57.11.3105	1M0	MF, 1%, 0207							
0	R 46	57.11.3512	5k1	MF, 1%, 0207							
0	R 47	57.11.3512	5k1	MF, 1%, 0207							
0	R 48	57.11.3105	1M0	MF, 1%, 0207							
0	R 50	57.92.7014	0.65A	POLY- PTC, 60V							
0	RZ 1	57.88.2101	R 4*100R	RZ 4 * 100 , 2%, SIP 8							
0	RZ 2	57.88.4104	100k	RZ 8 * 100 K, 2%, SIP 9							
0	RZ 3	57.88.2682	R 4*6k8	RZ 4 * 6.8 K, 2%, SIP 8							
0	RZ 4	57.88.2682	R 4*6k8	RZ 4 * 6.8 K, 2%, SIP 8							
0	RZ 5	57.88.2682	R 4*6k8	RZ 4 * 6.8 K, 2%, SIP 8							
0	RZ 6	57.88.2682	R 4*6k8	RZ 4 * 6.8 K, 2%, SIP 8							
0	RZ 7	57.88.4104	100k	RZ 8 * 100 K, 2%, SIP 9							
0	W 1	not used	0R0	MF, 0207							
0	W 2	not used	0R0	MF, 0207							
0	W 3	not used	0R0	MF, 0207							
0	W 4	not used	0R0	MF, 0207							
0	W 5	not used	0R0	MF, 0207							
0	W 6	not used	0R0	MF, 0207							
0	W 7	not used	0R0	MF, 0207							
0	W 8	not used	0R0	MF, 0207							
0	W 9	not used	0R0	MF, 0207							
0	W 10	not used	0R0	MF, 0207							
0	W 11	not used	0R0	MF, 0207							
0	W 12	not used	0R0	MF, 0207							
0	W 13	not used	0R0	MF, 0207							
0	W 14	not used	0R0	MF, 0207							
0	W 15	not used	0R0	MF, 0207							
0	W 16	not used	0R0	MF, 0207							
0	W 17	not used	0R0	MF, 0207							
0	W 18	not used	0R0	MF, 0207							
0	W 19	not used	0R0	MF, 0207							
0	W 20	not used	0R0	MF, 0207							
0	W 21	57.11.3000	0R0	MF, 0207							
0	W 22	57.11.3000	0R0	MF, 0207							
0	W 23	57.11.3000	0R0	MF, 0207							
0	W 24	57.11.3000	0R0	MF, 0207							
0	W 25	57.11.3000	0R0	MF, 0207							

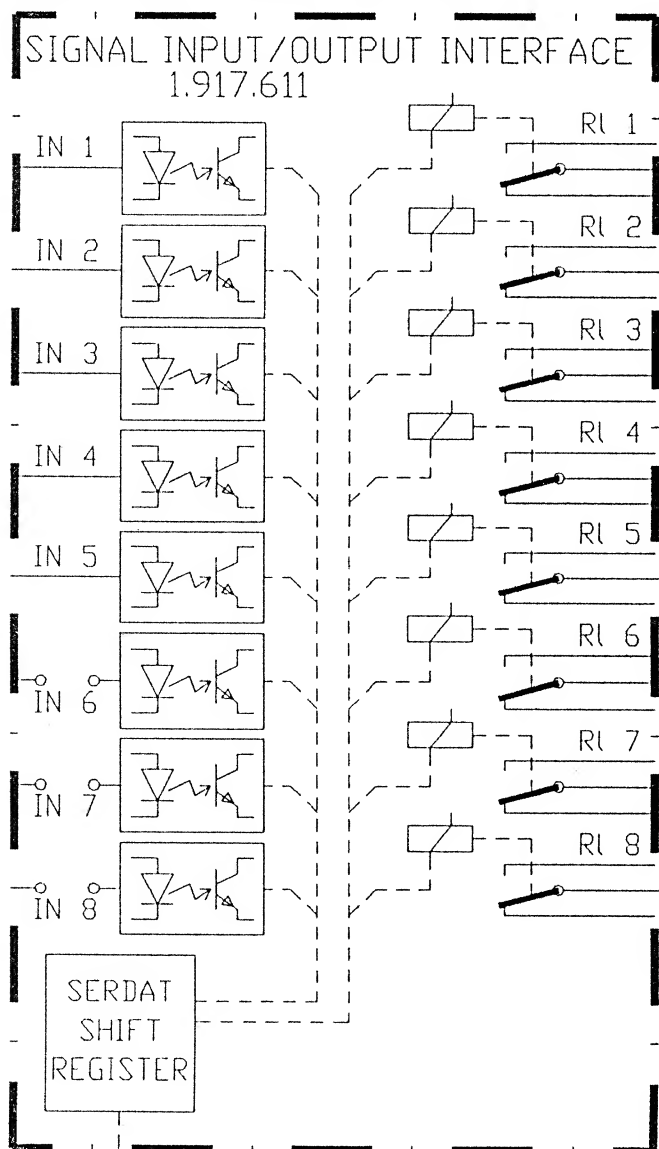
End of List

Comments

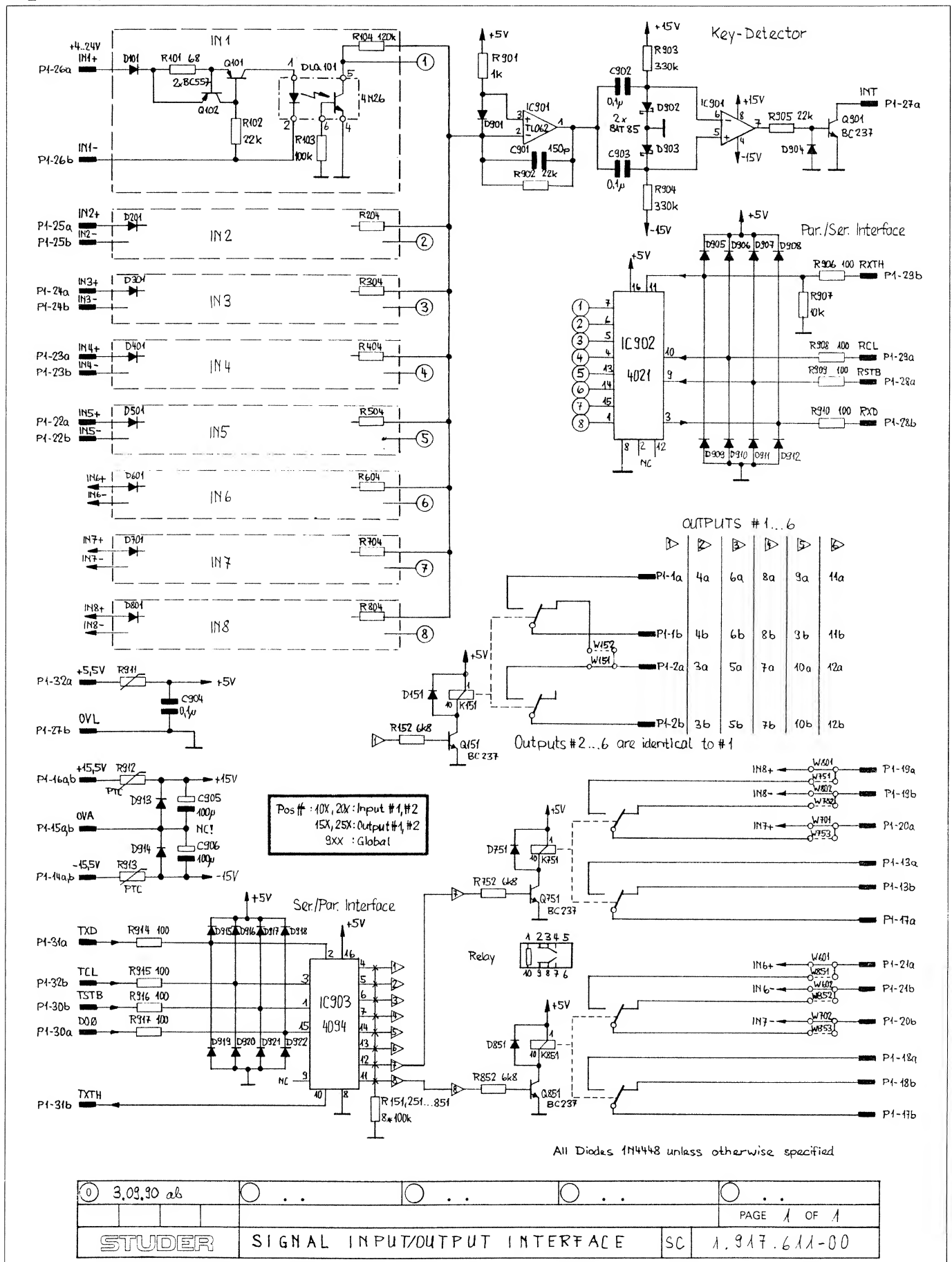
## Pin Location List

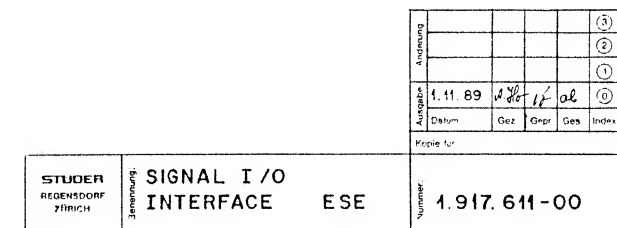
Monitor Relays Unit 8x2/2 1.917.601.00

P	NO	NAME	REMARK	B=BUS O=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC	
P1	01	0V-A	GROUND AUDIO		X X
P1	02A	BUS A-L-a	OUTPUT A LEFT a ; O-OHM BUS	B,S	
P1	02B	BUS A-L-b	OUTPUT A LEFT b ; O-OHM BUS	B,S	
P1	03A	BUS A-R-a	OUTPUT A RIGHT a ; O-OHM BUS	B,S	
P1	03B	BUS A-R-b	OUTPUT A RIGHT b ; O-OHM BUS	B,S	
P1	04A	BUS B-L-a	OUTPUT B LEFT a ; O-OHM BUS	B,S	
P1	04B	BUS B-L-b	OUTPUT B LEFT b ; O-OHM BUS	B,S	
P1	05A	BUS B-R-a	OUTPUT B RIGHT a ; O-OHM BUS	B,S	
P1	05B	BUS B-R-b	OUTPUT B RIGHT b ; O-OHM BUS	B,S	
P1	06	0V-A	GROUND AUDIO		X X
P1	07A	IN 1-L-a	INPUT 1 LEFT a ; RELAIS 1	O,S	
P1	07B	IN 1-L-b	INPUT 1 LEFT b ; RELAIS 1	O,S	
P1	08A	IN 1-R-a	INPUT 1 RIGHT a ; RELAIS 2	O,S	
P1	08B	IN 1-R-b	INPUT 1 RIGHT b ; RELAIS 2	O,S	
P1	09A	IN 2-L-a	INPUT 2 LEFT a ; RELAIS 3	O,S	
P1	09B	IN 2-L-b	INPUT 2 LEFT b ; RELAIS 3	O,S	
P1	10A	IN 2-R-a	INPUT 2 RIGHT a ; RELAIS 4	O,S	
P1	10B	IN 2-R-b	INPUT 2 RIGHT b ; RELAIS 4	O,S	
P1	11	0V-A	GROUND AUDIO		X X
P1	12A	IN 3-L-a	INPUT 3 LEFT a ; RELAIS 5	O,S	
P1	12B	IN 3-L-b	INPUT 3 LEFT b ; RELAIS 5	O,S	
P1	13A	IN 3-R-a	INPUT 3 RIGHT a ; RELAIS 6	O,S	
P1	13B	IN 3-R-b	INPUT 3 RIGHT b ; RELAIS 6	O,S	
P1	14	- 15.5V	- SUPPLY	B	X X
P1	15	0V-A	GROUND AUDIO	B	X X
P1	16	+ 15.5V	+ SUPPLY	B	X X
P1	17A	IN 4-L-a	INPUT 4 LEFT a ; RELAIS 7	O,S	
P1	17B	IN 4-L-b	INPUT 4 LEFT b ; RELAIS 7	O,S	
P1	18A	IN 4-R-a	INPUT 4 RIGHT a ; RELAIS 8	O,S	
P1	18B	IN 4-R-b	INPUT 4 RIGHT b ; RELAIS 8	O,S	
P1	19A	IN 5-L-a	INPUT 5 LEFT a ; RELAIS 9	O,S	
P1	19B	IN 5-L-b	INPUT 5 LEFT b ; RELASI 9	O,S	
P1	20A	IN 5-R-a	INPUT 5 RIGHT a ; RELAIS 10	O,S	
P1	20B	IN 5-R-b	INPUT 5 RIGHT b ; RELAIS 10	O,S	
P1	21A	IN 6-L-a	INPUT 6 LEFT a ; RELAIS 11	O,S	
P1	21B	IN 6-L-b	INPUT 6 LEFT b ; RELASI 11	O,S	
P1	22A	IN 6-R-a	INPUT 6 RIGHT a ; RELAIS 12	O,S	
P1	22B	IN 6-R-b	INPUT 6 RIGHT b ; RELAIS 12	O,S	
P1	23	0V-A	GROUND AUDIO		X X
P1	24A	IN 7-L-a	INPUT 7 LEFT a ; RELAIS 13	O,S	
P1	24B	IN 7-L-b	INPUT 7 LEFT b ; RELAIS 13	O,S	
P1	25A	IN 7-R-a	INPUT 7 RIGHT a ; RELAIS 14	O,S	
P1	25B	IN 7-R-b	INPUT 7 RIGHT b ; RELAIS 14	O,S	
P1	26A	IN 8-L-a	INPUT 8 LEFT a ; RELAIS 15	O,S	
P1	26B	IN 8-L-b	INPUT 8 LEFT b ; RELAIS 15	O,S	
P1	27A	IN 8-R-a	INPUT 8 RIGHT a ; RELAIS 16	O,S	
P1	27B	IN 8-R-b	INPUT 8 RIGHT b ; RELAIS 16	O,S	
P1	28	0V-L	GROUND SIGN (LOGIC)	B	X X
P1	29A	DO 0	DATA OUT 0 (ENABLE)		
P1	29B	TSTB 5	TRANSMIT STROBE 5		
P1	30A	-	RES		
P1	30B	TXTH	TRANSMIT DATA THROUGH		
P1	31A	TXD	TRANSMIT DATA		
P1	31B	TCL	TRANSMIT CLOCK		
P1	32	+ 5.5V	+ SUPPLY	B	X X

**Signal Input / Output Interface 1.917.611.00**

## Signal Input / Output Interface 1.917.611.00





Ad	POS.	REF.	DESCRIPTION	MANUFACTURER
D...501	50.04.0125	1N4448		any
D...551	50.04.0125	1N4448		any
D...601	50.04.0125	1N4448		any
D...651	50.04.0125	1N4448		any
D...701	50.04.0125	1N4448		any
D...751	50.04.0125	1N4448		any
D...801	50.04.0125	1N4448		any
D...851	50.04.0125	1N4448		any
D...901	50.04.0125	1N4448		any
D...902	50.04.0127	BA785	schottky	any
D...903	50.04.0127	BA785	schottky	any
D...904	50.04.0125	1N4448		any
D...905	50.04.0125	1N4448		any
D...906	50.04.0125	1N4448		any
D...907	50.04.0125	1N4448		any
D...908	50.04.0125	1N4448		any
D...909	50.04.0125	1N4448		any
D...910	50.04.0125	1N4448		any
D...911	50.04.0125	1N4448		any
D...912	50.04.0125	1N4448		any
D...913	50.04.0125	1N4448		any
D...914	50.04.0125	1N4448		any
D...915	50.04.0125	1N4448		any
D...916	50.04.0125	1N4448		any
D...917	50.04.0125	1N4448		any
D...918	50.04.0125	1N4448		any
D...919	50.04.0125	1N4448		any
D...920	50.04.0125	1N4448		any
D...921	50.04.0125	1N4448		any
D...922	50.04.0125	1N4448		any

MANUFACTURER: TI=Texas Instrument, St=Studer

## Pin Location List

## Signal Input / Output Interface 1.917.611.00

1.1 = RELAIS 1 , CONTACT 1  
 a = MAKE CONTACT ; ARBEITSKONTAKT  
 r = BREAK CONTACT ; RUHEKONTAKT  
 s = SWITCH CONTACT ; SCHALT KONTAKT

P	NO	NAME	REMARK	
-----			-----	
				B=BUS O=CONNECTION S=SYMMETRIC I=INVERS AS=ASYMMETRIC -----
P1	01A	1.1-a	RELAIS 1.1	A
P1	01B	1.1-s	RELAIS 1.1	A
P1	02A	1.2-a/1.1-r	RELAIS 1.2 / RELAIS 1.1	A
P1	02B	1.2-s	RELAIS 1.2	A
P1	03A	2.2-a/2.1-r	RELAIS 2.2 / RELAIS 2.1	A
P1	03B	2.2-s	RELAIS 2.2	A
P1	04A	2.1-a	RELAIS 2.1	B
P1	04B	2.1-s	RELAIS 2.1	B
P1	05A	3.2-a/3.1-r	RELAIS 3.2 / RELAIS 3.1	B
P1	05B	3.2-s	RELAIS 3.2	B
P1	06A	3.1-a	RELAIS 3.1	B
P1	06B	3.1-s	RELAIS 3.1	B
P1	07A	4.2-a/4.1-r	RELAIS 4.2 / RELAIS 4.1	C
P1	07B	4.2-s	RELAIS 4.2	C
P1	08A	4.1-a	RELAIS 4.1	C
P1	08B	4.1-s	RELAIS 4.1	C
P1	09A	5.1-a	RELAIS 5.1	C
P1	09B	5.1-s	RELAIS 5.1	C
P1	10A	5.2-a/5.1-r	RELAIS 5.2 / RELAIS 5.1	D
P1	10B	5.2-s	RELAIS 5.2	D
P1	11A	6.1-a	RELAIS 6.1	D
P1	11B	6.1-s	RELAIS 6.1	D
P1	12A	6.2-a/6.1-r	RELAIS 6.2 / RELAIS 6.1	D
P1	12B	6.2-s	RELAIS 6.2	D
P1	13A	7.2-a	RELAIS 7.2	E
P1	13B	7.2-r	RELAIS 7.2	E
P1	14	- 15.5V	- SUPPLY	B X X
P1	15	0V-A	GROUND AUDIO	B X X
P1	16	+ 15.5V	+ SUPPLY	B X X
P1	17A	7.2-s	RELAIS 7.2	E
P1	17B	8.2-s	RELAIS 8.2	E
P1	18A	8.2-a	RELAIS 8.2	F
P1	18B	8.2-r	RELAIS 8.2	F
P1	19A	IN 8+ / 7.1-a	OPTO IN 8+ / RELAIS 7.1	F
P1	19B	IN 8- / 7.1-r	OPTO IN 8- / RELAIS 7.1	F
P1	20A	IN 7+ / 7.1-s	OPTO IN 7+ / RELAIS 7.1	F
P1	20B	IN 7- / 8.1-a	OPTO IN 7- / RELAIS 8.1	F
P1	21A	IN 6+ / 8.1-r	OPTO IN 6+ / RELAIS 8.1	F
P1	21B	IN 6- / 8.1-s	OPTO IN 6- / RELAIS 8.1	F
P1	22A	IN 5+	OPTO IN 5+	G
P1	22B	IN 5-	OPTO IN 5-	G
P1	23A	IN 4+	OPTO IN 4+	G
P1	23B	IN 4-	OPTO IN 4-	G
P1	24A	IN 3+	OPTO IN 3+	G
P1	24B	IN 3-	OPTO IN 3-	G
P1	25A	IN 2+	OPTO IN 2+	H
P1	25B	IN 2-	OPTO IN 2-	H
P1	26A	IN 1+	OPTO IN 1+	H
P1	26B	IN 1-	OPTO IN 1-	H
P1	27A	INT	INTERUPT	
P1	27B	OV-L	GROUND SIGN (LOGIC)	B X X
P1	28A	RSTB	RECEIVE STROBE	
P1	28B	RXD	RECEIVE DATA	
P1	29A	RCL	RECEIVE CLOCK	
P1	29B	RXTH	RECEIVE DATA THROUGH	
P1	30A	DO 0	DATA OUT 0 (ENABLE)	
P1	30B	TSTB	TRANSMIT STROBE	
P1	31A	TXD	TRANSMIT DATA	
P1	31B	TXTH	TRANSMIT DATA THROUGH	
P1	32A	+ 5.5V	+ SUPPLY	B
P1	32B	TCL	TRANSMIT CLOCK	



## 8 POWER SUPPLY UNITS

**General** For the power supply of the D940/D941 mixing consoles, Coutant 19" units (HSU series) are used which are equipped with a Studer front panel.

Studer Part No.	Description	Basic Coutant product
1.940.601.00	Power Supply 5 V/20 A	HSU-100-10
1.940.602.00	Power Supply $\pm 15$ V/3.4 A	HSU-100-23
1.940.603.00	Power Supply 24 V/4.2 A	HSU-100-13



**Important** As the power supply units are safety-relevant parts, they may be serviced only by authorized personnel using original spare parts. For replacement, contact your nearest Studer representative; for repair, contact the nearest Coutant distributor. The Coutant brand is represented worldwide by companies with the following names: Coutant, Coutant-Lambda, Lambda-Coutant, Lambda electronics, Nemic-Lambda, or CL electronics.

### 8.1 Specifications

**Mains voltages:** 230 V (200...240 V  $\pm 10\%$ )  
115 V (100...120 V  $\pm 10\%$ )

**Voltage selector:** Jumper below cover

**Mains frequency:** 47...440 Hz

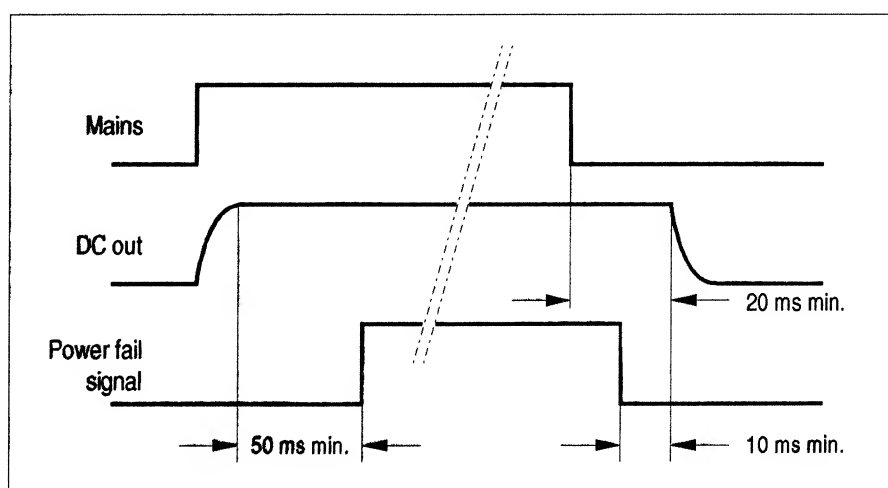
**Efficiency:** typ. 75%

**Output power:** 100 W total

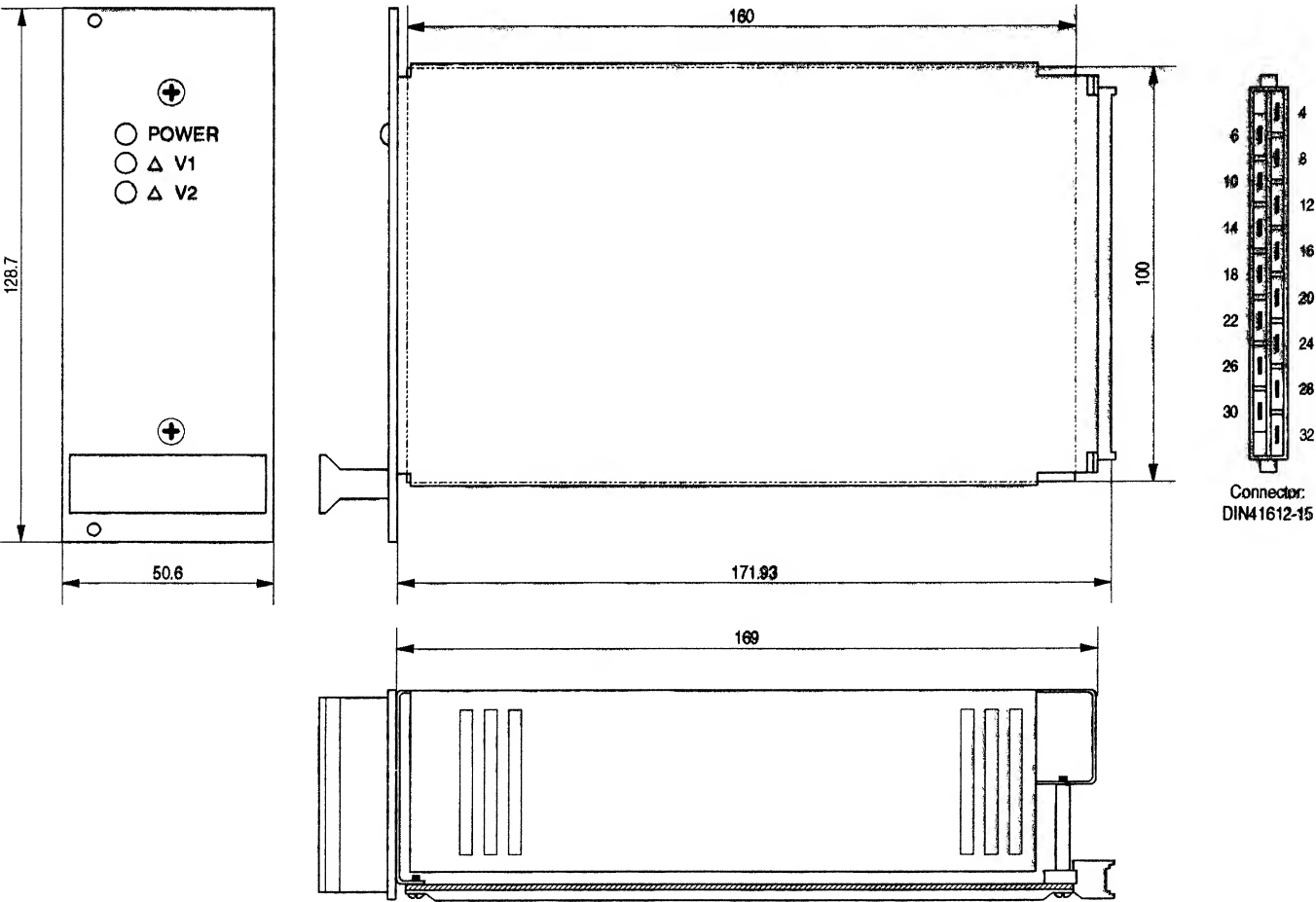
**Output(s):** short-circuit protected, main output(s) overload protected (110%)

**Power down (logic inhibit):** Control input, TTL compatible, active high (5 V/1.6 mA)

**Power fail:** Output, open collector, TTL compatible, active low (max. 30 V/16 mA) (see diagram below).



Dimensions: (in mm)



Pin assignment:

Pin	Single output	Twin output
4	V1 +	V1 +
6	V1 +	V1 GND
8	Sense +	V2 -
10	Sense GND	V2 GND
12	V1 GND	
14	V1 GND	
16		
18		
20	Logic inhibit	Logic inhibit
22	Power fail	Power fail
24		
26		
28	AC live	AC live
30	AC neutral	AC neutral
32	Safety GND	Safety GND

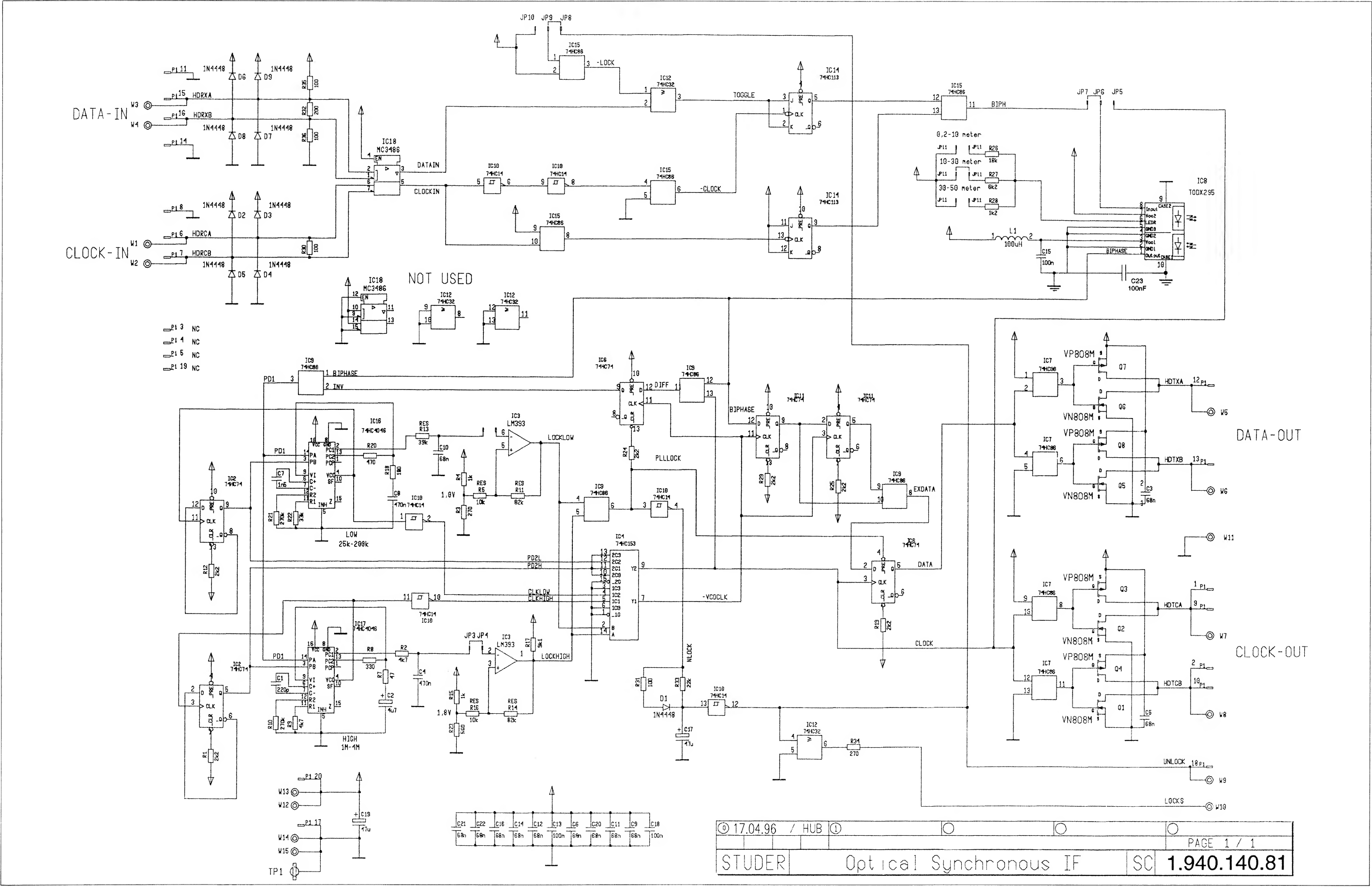
**SCHEMATA / CIRCUIT DIAGRAMS**

**Connector Panel**

Optical Synchronous IF ..... 1.940.140.81

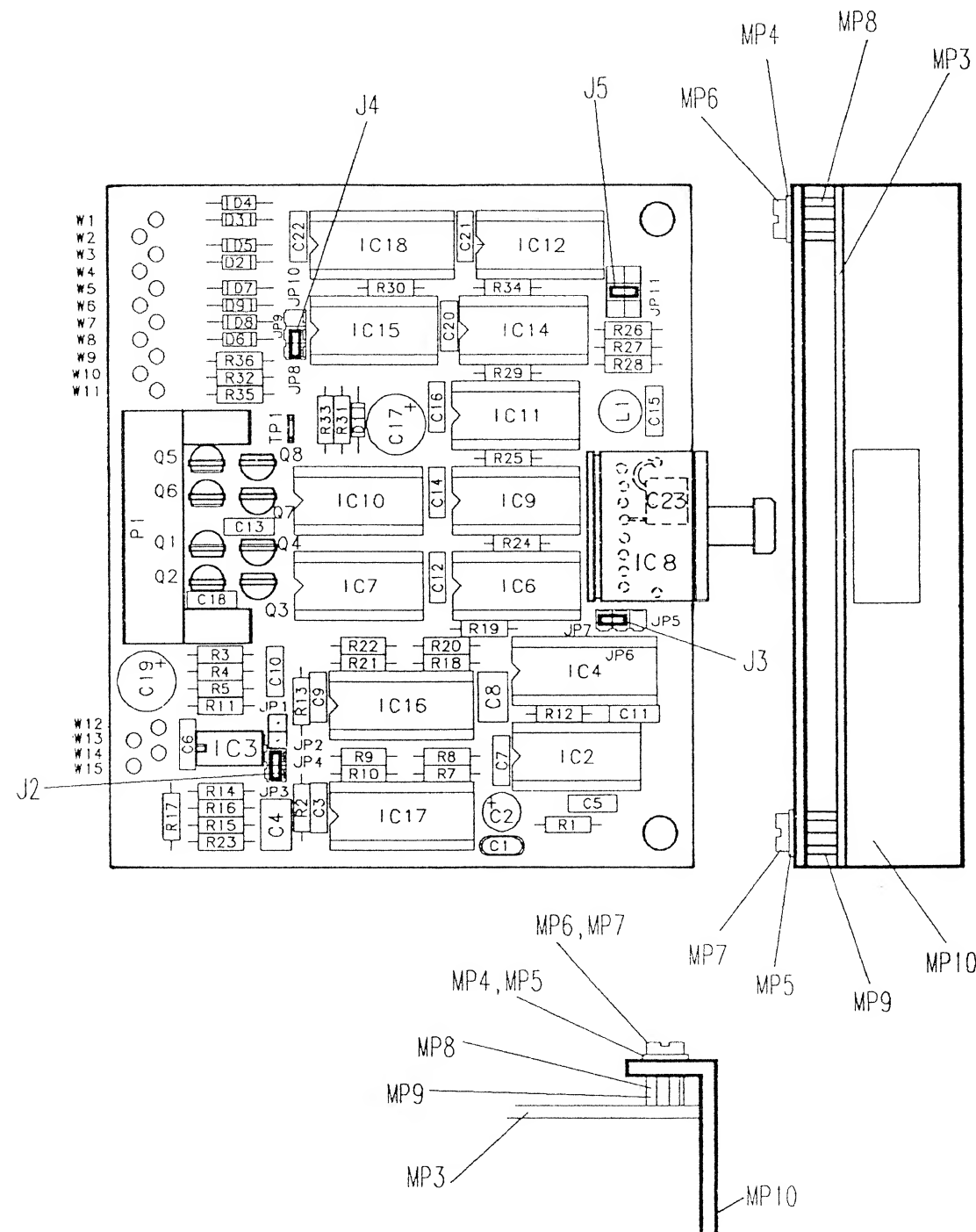


Optical Synchronous Interface 1.940.140.81





## Optical Synchronous Interface 1.940.140.81



Idx.	Pos.	Part No.	Qty.	Type/Val.	Description	Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.34.4221		220p	C 220 P , 5%, N750 , CER	0	Q 1	50.03.1505		VN0808M	VN 0808 M, ZVN 0108 A
0	C 2	59.22.8479		4u7	EL 50V, 20%, rad RM5	0	Q 2	50.03.1505		VN0808M	VN 0808 M, ZVN 0108 A
0	C 3	59.06.0683		68n	PETP, 10%, 63V	0	Q 3	50.03.1554		VP0808M	VP 0808 M
0	C 4	59.06.0474		470n	PETP, 10%, 63V	0	Q 4	50.03.1554		VP0808M	VP 0808 M
0	C 5	59.06.0683		68n	PETP, 10%, 63V	0	Q 5	50.03.1505		VN0808M	VN 0808 M, ZVN 0108 A
0	C 6	59.06.0683		68n	PETP, 10%, 63V	0	Q 6	50.03.1505		VN0808M	VN 0808 M, ZVN 0108 A
0	C 7	59.06.0152		1n5	PETP, 10%, 63V	0	Q 7	50.03.1554		VP0808M	VP 0808 M
0	C 8	59.06.0474		470n	PETP, 10%, 63V	0	Q 8	50.03.1554		VP0808M	VP 0808 M
0	C 9	59.06.0683		68n	PETP, 10%, 63V						
0	C 10	59.06.0683		68n	PETP, 10%, 63V	0	R 1	57.11.3222		2k2	MF, 1%, 0207
0	C 11	59.06.0683		68n	PETP, 10%, 63V	0	R 2	57.11.3472		4k7	MF, 1%, 0207
0	C 12	59.06.0683		68n	PETP, 10%, 63V	0	R 3	57.11.3271		270R	MF, 1%, 0207
0	C 13	59.06.0104		100n	PETP, 10%, 63V	0	R 4	57.11.3102		1k0	MF, 1%, 0207
0	C 14	59.06.0683		68n	PETP, 10%, 63V	0	R 5	57.11.3103		10k	MF, 1%, 0207
0	C 15	59.06.0104		100n	PETP, 10%, 63V	0	R 6	not used		9k1	MF, 1%, 0207
0	C 16	59.06.0683		68n	PETP, 10%, 63V	0	R 7	57.11.3470		47R	MF, 1%, 0207
0	C 17	59.22.6470		47u	EL 40V, 20%, rad RM5	0	R 8	57.11.3331		330R	MF, 1%, 0207
0	C 18	59.06.0104		100n	PETP, 10%, 63V	0	R 9	57.11.3472		4k7	MF, 1%, 0207
0	C 19	59.22.6470		47u	EL 40V, 20%, rad RM5	0	R 10	57.11.3274		270k	MF, 1%, 0207
0	C 20	59.06.0683		68n	PETP, 10%, 63V	0	R 11	57.11.3823		82k	MF, 1%, 0207
0	C 21	59.06.0683		68n	PETP, 10%, 63V	0	R 12	57.11.3222		2k2	MF, 1%, 0207
0	C 22	59.06.0683		68n	PETP, 10%, 63V	0	R 13	57.11.3393		39k	MF, 1%, 0207
0	C 23	59.06.0104		100n	PETP, 10%, 63V	0	R 14	57.11.3823		82k	MF, 1%, 0207
						0	R 15	57.11.3102		1k0	MF, 1%, 0207
0	D 1	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35	0	R 16	57.11.3103		10k	MF, 1%, 0207
0	D 2	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35	0	R 17	57.11.3912		9k1	MF, 1%, 0207
0	D 3	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35	0	R 18	57.11.3181		180R	MF, 1%, 0207
0	D 4	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35	0	R 19	57.11.3222		2k2	MF, 1%, 0207
0	D 5	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35	0	R 20	57.11.3471		470R	MF, 1%, 0207
0	D 6	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35	0	R 21	57.11.3274		270k	MF, 1%, 0207
0	D 7	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35	0	R 22	57.11.3333		33k	MF, 1%, 0207
0	D 8	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35	0	R 23	57.11.3561		560R	MF, 1%, 0207
0	D 9	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35	0	R 24	57.11.3222		2k2	MF, 1%, 0207
						0	R 25	57.11.3222		2k2	MF, 1%, 0207
0	IC 2	50.17.1074		74HC74	IC ... 74 HC 74 .. ,A	0	R 26	57.11.3183		18k	MF, 1%, 0207
0	IC 3	50.05.0283		LM393	Dual Comparator	0	R 27	57.11.3622		6k2	MF, 1%, 0207
0	IC 4	50.17.1153		74HC153	IC ... 74 HC 153 .. ,A	0	R 28	57.11.3122		1k2	MF, 1%, 0207
0	IC 6	50.17.1074		74HC74	IC ... 74 HC 74 .. ,A	0	R 29	57.11.3222		2k2	MF, 1%, 0207
0	IC 7	50.17.1086		74HC86	IC ... 74 HC 86 .. ,A	0	R 30	57.11.3101		100R	MF, 1%, 0207
0	IC 8	89.10.0101			TODX 295	0	R 31	57.11.3101		100R	MF, 1%, 0207
0	IC 9	50.17.1086		74HC86	IC ... 74 HC 86 .. ,A	0	R 32	57.11.3201		200R	MF, 1%, 0207
0	IC 10	50.17.1014		74HC14	IC ... 74 HC 14 .. ,A	0	R 33	57.11.3223		22k	MF, 1%, 0207
0	IC 11	50.17.1074		74HC74	IC ... 74 HC 74 .. ,A	0	R 34	57.11.3271		270R	MF, 1%, 0207
0	IC 12	50.17.1032		74HC32	IC ... 74 HC 32 .. ,A	0	R 35	57.11.3101		100R	MF, 1%, 0207
0	IC 14	50.17.1113		74HC113	IC ... 74 HC 113 .. ,A	0	R 36	57.11.3101		100R	MF, 1%, 0207
0	IC 15	50.17.1086		74HC86	IC ... 74 HC 86 .. ,A						
0	IC 16	50.17.4046			IC ... 74 HC 4046 .. ,A						
0	IC 17	50.17.4046			IC ... 74 HC 4046 .. ,A						
0	IC 18	50.15.0104		MC3486	IC MC 3486 P, DS 3486 N,						
										End of List	
<u>Comments</u>											
0	J 2	54.01.0021		Jumper	0.63 * 0.63mm						
0	J 3	54.01.0021		Jumper	0.63 * 0.63mm						
0	J 4	54.01.0021		Jumper	0.63 * 0.63mm						
0	J 5	54.01.0021		Jumper	0.63 * 0.63mm						
0	JP 1	54.01.0020		1-P	P STIFT .63*.63, H=5.8/3.4						
0	JP 2	54.01.0020		1-P	P STIFT .63*.63, H=5.8/3.4						
0	JP 3	54.01.0020		1-P	P STIFT .63*.63, H=5.8/3.4						
0	JP 4	54.01.0020		1-P	P STIFT .63*.63, H=5.8/3.4						
0	JP 5	54.01.0020		1-P	P STIFT .63*.63, H=5.8/3.4						
0	JP 6	54.01.0020		1-P	P STIFT .63*.63, H=5.8/3.4						
0	JP 7	54.01.0020		1-P	P STIFT .63*.63, H=5.8/3.4						
0	JP 8	54.01.0020		1-P	P STIFT .63*.63, H=5.8/3.4						
0	JP 9	54.01.0020		1-P	P STIFT .63*.63, H=5.8/3.4						
0	JP 10	54.01.0020		1-P	P STIFT .63*.63, H=5.8/3.4						
0	JP 11	54.11.0136		2*3p	Pin 0.63*0.63, RM2.54						
0	L 1	62.02.3101		100uH	L 100 U, 10%, RAD., RM 5						
0	MP 1	43.01.0108	pce	Label	ESE-WARNSCHILD						
0	MP 2	1.940.140.04	pce		NR-ETIKETTE 5 * 20						
0	MP 3	1.940.140.11	pce		OPTICAL SYNCHRONOUS PCB //A						
0	MP 4	24.16.1030	pce		RIPPENSCHIEBE D 3.2/5.5						
0	MP 5	24.16.1030	pce		RIPPENSCHIEBE D 3.2/5.5						
0	MP 6	21.53.0354	pce		Z - SCHR. IS , ZN , M 3 * 6						
0	MP 7	21.53.0354	pce		Z - SCHR. IS , ZN , M 3 * 6						
0	MP 8	1.010.014.22	pce	3*4.5	NIETMUTTER SW 6 M 3 *4,5						
0	MP 9	1.010.014.22	pce	3*4.5	NIETMUTTER SW 6 M 3 *4,5						
0	MP 10	1.940.140.01	pce		PRINTHALTER						